THE VOCABULARY LEARNING STRATEGIES OF LIBYAN UNIVERSITY STUDENTS OF ENGLISH AND THEIR VOCABULARY KNOWLEDGE

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To my Father and Mother

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To my Father and Mother

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Author's Declaration

I certify that, to best to my knowledge, all the material in this thesis represent my own work and that no material is included which has been submitted for any other award or qualification.

Signature: .....

Date: 08-04-2008

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Abstract

This research investigated the vocabulary learning strategies of Libyan University students of English and their Vocabulary Knowledge. 112 final year students in two departments of English language at The 7th of April University in Libya were asked to complete a vocabulary learning strategies (VLS) questionnaire to identify the range and frequency of VLS these learners use. Their responses were correlated with their results on three vocabulary tests used to measure the learners' vocabulary knowledge in terms of reception, controlled production and free production.

The findings show that the Libyan EFL learners in both groups reported using a wide range of VLS even though the frequency of use is relatively low. Learners also reported using discovery strategies such as using dictionaries, and guessing meaning from context more frequently than consolidation strategies such as practising in groups, making word lists, or assessing vocabulary knowledge. The results of the vocabulary tests indicate that the Libyan EFL learners' receptive, controlled productive and free productive vocabulary knowledge is very low taking into account that they are a final year English majors. Moreover, there are high positive correlations between the learners' scores in the three vocabulary tests. An unexpected result was the difference between the two groups in terms of the frequency of using some VLS as well as their vocabulary knowledge.

The findings also show that out of 44 VLS investigated, 23 were significantly correlated with the three vocabulary knowledge dimensions (receptive, controlled productive and free productive vocabulary knowledge). With regard to the discovery strategies, using monolingual dictionary, guessing meaning from context and identifying part of speech were positively correlated with the learners' vocabulary knowledge. Regarding

consolidation strategies, the strategies of learning words of an idiom together, making an image of the form of the word, using the new word in sentences, making own lists of words, and using media were positively correlated with the learners' vocabulary knowledge. In a multiple-regression analysis, guessing meaning from context and identifying part of speech, two discovery strategies, and learning words of an idiom together, making image of the form of the word and making own lists of words, three consolidation strategies, appeared as the best positive predictors of the learners' vocabulary knowledge.

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List of Abbreviations

COG: Cognitive Strategies

CPA: Vocabulary Size Test of Controlled Productive Ability

DET: Determination Strategies

EFL: English as a foreign language

ESL: English as a second language

FPA: Vocabulary Size Test of Free Productive Ability

GSL: General Service List

HVK: High Vocabulary Knowledge

LLS: Language Learning Strategies

LT: Language Testing

LVK: Low Vocabulary Knowledge

MEM: Memory Strategies

MET: Metacognitive Strategies

MVK: Moderate Vocabulary Knowledge

SILL: Strategy Inventory for Language Learning

SLA: Second Language Acquisition

SOC: Social Strategies

VLS: Vocabulary Learning Strategies

VLSQ: Vocabulary Learning Strategies Questionnaire

VLT: Vocabulary Levels Test

CHAPTER ONE

Introduction

This chapter presents the focus, motivation, and aims of the current study. It goes on to describe the context where the study was conducted and ends with outlining the organization of the thesis.

1.1. The Focus and the Motivation of the Study

Before explaining the reasons behind undertaking this study, we need to look at the importance of vocabulary learning. When students travel, they do not carry grammar books, they carry dictionaries. This thesis does not aim to devalue the importance of grammar in language learning; but to show vocabulary as an important aspect of language learning that should be considered as the core of language learning and teaching. Vermeer (1992, p. 147) stresses the importance of vocabulary in terms of practice:

> Knowing words is the key of understanding and being understood. Children acquire words first, and next the grammar of language. The bulk of learning a new language consists of learning new words: grammatical knowledge does not make for great proficiency in a language.

In this respect, there is also a much-quoted statement by Wilkins saying: "Without grammar very little can be conveyed, without vocabulary nothing can be conveyed" (Wilkins, 1972, p. 111). Chomsky (1989) says that all learning is vocabulary learning: "there is only one human language apart from the lexicon, and language acquisition is in essence a matter of determining lexical idiosyncrasies" (p. 44).

Recently, there has been an interest in language learners, and how they exercise their learning strategies. The preconceived notion that some people are gifted or that they have

an "ear" for language learning has been contradicted by the suggestions that there might be differences between the strategies used by good and poor learners. Good learners are more effective in terms of language learning because of the means they use for processing information; poor learners could also be taught how to use a range of more effective language learning strategies like those that good learners use (O'Malley and Chamot, 1990, p. 2). These suggestions were first introduced by Rubin (1975) and by Stern (1975). Asserting the importance of knowledge about language learning, Cook (2001) writes:

> All successful teaching depends on learning; there is no point in providing entertaining, lively, well-constructed language lessons if students do not learn from them. The proof of the teaching is in the learning. One crucial factor in L2 learning is what the students bring with them into the classroom (p. 10).

Recently more attention has been paid to vocabulary learning by researchers, materials designers, and teachers who have been trying to find answers to questions such as the strategies that learners use to acquire new words or to remember them. Most learners tend to use simple memorization, repetition, and taking notes about vocabulary (Schmitt, 2000). They often favour these simple strategies over the complex ones involving significant effort required for manipulating information (O'Malley and Chamot, 1990). Moreover, some learners may be unaware of the various vocabulary learning strategies (VLS) they might use in order to develop their vocabulary acquisition.

In general, the current study aims to identify the vocabulary learning strategies (VLS) used by Libyan English language majors at university level. The focus is particularly on Libyan students to see whether the Libyan context is typical or different from other contexts since there are no studies related to VLS conducted on the Libyan context. It goes further to explore their vocabulary knowledge and proceeds to investigate the relationship between these learners' VLS and their vocabulary knowledge. The study in

hand is motivated by some convincing reasons. First of all as an EFL learner, I still remember myself being engaged in conversation and struggling to find an English word that would help to convey a message in English. As an EFL teacher involved in teaching some modules of conversation and writing, I would also be aware of my EFL learners' problems with vocabulary when they try to communicate in English in spoken and written discourse. This made me think that vocabulary is the fundamental aspect on which other aspects such as grammar are built; when learners lack vocabulary knowledge, they can do nothing without it.

Second, EFL learners encounter many vocabulary problems in all language skills. These problems are related to lack of knowledge of vocabulary, i.e. there are words learners have not learned yet or know only partially (problems with competence) as well as words they know but are not always able to use or to access (problems with performance). Lack of knowledge about vocabulary can cause problems with aspects such as spelling, meaning, collocation, literal translation from L1 and so on. This lack of lexical knowledge for EFL learners can be attributed to factors such as unawareness of various vocabulary learning strategies (VLS) or ineffectively using them.

Third, in general quite a lot of research has been conducted on language learner strategies as individuals or as groups. However, most of the research in the area of VLS has focused on individual strategies with only few studies investigating VLS as a whole (e.g. Gu & Johnson, 1996; Schmitt, 1997). To my knowledge, there have been no studies that tackled the VLS used by the Libyan EFL learners of English. Moreover, very few large-scale studies (e.g. Gu and Johnson, 1996) have explicitly measured the relationship between learners' reported use of VLS and their vocabulary knowledge. Thus, the current study

aims to fill this gap by providing detailed information about the VLS used by Libyan EFL learners at university level and how their VLS relate to their vocabulary knowledge in terms of reception, controlled production and free production.

Fourth, as an EFL teacher in the Libyan setting for many years, I could observe that English language classes are still teacher-centred, and learners are still not responsible for their learning. The need for independence and responsibility central to learner-centred education is the most important goal of the research on learning strategies, i.e. to shift the responsibility of learning from the teacher to the learner (Wittrock, 1979). Hence, exploring the learners' VLS would help teachers be aware of the range of strategies their learners use, so, teachers can enhance learners' achievement by providing learners with strategies that satisfy their expectations and help them to succeed in language learning.

Finally, we have to be realistic in terms of cultural and social constraints that control strategies use, so we might benefit more from the strategies used by the successful Libyan EFL learners rather than asking learners to employ strategies used by successful learners in other settings or contexts. The Libyan learners all share the same cultural, linguistic background as well as the same environment where learning processes take place, and these factors can influence learning. I think these reasons fully justify the choice of the vocabulary learning strategies (VLS) used by the Libyan EFL learners in relation to their vocabulary knowledge as the subject of this study.

1.2. Aims

In general, this study aims to identify the VLS used by the Libyan English majors at university level, and proceeds to explore the relationship between the VLS they use and their vocabulary knowledge. The key issues to be investigated are as follows:

- the range and frequency of VLS the Libyan EFL learners use;
- the learners' vocabulary knowledge in terms of reception, controlled production and free production;
- the relationship between the learners' receptive, controlled productive and free productive vocabulary knowledge;
- the relationship between the learners' VLS and their vocabulary knowledge;
- how the learners' VLS may be affected by their motivation to learn English.

1.3. Context

The study in hand was conducted on the final year (4^{th} year) English majors at the 7th of April University in two separate departments of English language in Zawia and Sabratha, two cities in the north-western part of Libya. The 7th of April University which is situated in Zawia was established in 1984 beginning with two faculties: the Faculty of Arts, and the Faculty of Sciences. The Faculty of Arts comprises some departments, one of which is the department of English language, whereas the department of English language in Sabratha was recently established in 2000. Each department admits about 100 students to study English at the BA level each year. Students have to pass the intermediate education level to be admitted (see Section 1.3.1 below for more information about education system in Libya). They also have to pass an admission test before being admitted. Due to shortages of classrooms and teaching staff, class size is usually big and ranges from thirty

to forty students. Students graduate with a BA in English language after passing about 140 credits distributed throughout four years of study. About 40 of the Total credits offered are general educational and cultural non-English courses that are taught in Arabic. The English modules offered include: basic and advanced grammar, reading comprehension, writing, language laboratories, phonetics and phonology, translation courses, literature, and linguistics.

Some differences between the two campuses can be identified. First, compared with Sabratha students (Group B), the competition for admission is assumed to be higher among Zawai (Group A) students, since Zawia is a big city and the number of students applying for admissions at the department of English exceeds 300 applicants each year from which about 100 students get admitted. Second, since Sabratha department was recently established, according to a colleague of mine, it used to have some problems such as shortages of teaching staff during the last years.

1.3.1. Education System in Libya

The educational structure has divided the educational system in Libya into five stages as the following:

1. *Kindergarten*. This lasts for two years and it enrols the children at the age of four and five.
2. *Basic education*. This entails nine years of study and enrols the age group (6-15) years. It includes grade one, grade two, and so on to grade nine
3. *Intermediate education and training*. This includes three to four years of study and it enrols the age group of (16 to 19) years old. This system consists of general secondary education and vocational centres and institutions. Secondary schools

are divided into six specializations: basic sciences, engineering and industrial sciences, medical sciences, agricultural sciences, social sciences, and fine arts and media. The idea behind the plan is to prepare students for a level of specialization at university.

4. *University education.* This includes universities, higher institutions, and higher technical and vocational centres.
5. *Advanced studies.* This includes Masters and PhD (Doctorate).

1.3.2. Teaching English in Libya

In public schools in Libya, English language is taught as a school subject starting from grade seven and continuing until the end of intermediate education and training. However, since 2005 the Libyan educational system has started to introduce some changes into the basic education syllabus such as starting teaching English from grade five and adding computing (ICT) as a subject from grade three. English classes meet four times a week (3 hours). In the first six years of English, from fifth basic education to first secondary, the books cover general English. In the final two secondary years, different books have been written for each of the six specializations, as described in point 3, Section 1.3.1. At university level, English is also taught to non-English major students as a compulsory subject. Depending on different faculties, some departments require their students to take two courses of English: English A and English B, others four courses: a course per year, while other faculties such as medicine use English as a medium of instruction.

Students in Libya have restricted access to English. Outside the classroom, where students have opportunities to meet other people, they speak their own mother tongue, Arabic. Thus, students have very few opportunities to communicate with target language speakers. This means that what happens in the classroom is absolutely vital for their language development.

Since vocabulary knowledge and VLS are the key issues of this thesis, the following paragraphs proceeds to provide some information about the typical ways of teaching vocabulary in Libya, relying mainly on the researcher's experience as an EFL teacher in Libyan secondary schools and universities.

As far as teaching vocabulary in the Libyan situation is concerned, the extent of attention to vocabulary differs depending on the level of education and the taught modules. English is taught from the basic level (grade five) onward. In the basic and intermediate levels, it is often that the teacher starts the lesson which usually includes a reading passage by writing the new words on the board, and pronouncing them for the students. The teacher would also ask the students to repeat the words after him to make sure that the students are pronouncing the words correctly. Arabic language often dominates the classroom interaction especially when explaining the meaning of the new words. After that the teacher moves to read the reading passage for the students and then s/he selects some students to read the passage aloud. The teacher usually makes sure that students pronounce the words correctly, and sometimes s/he interrupts their reading to correct their pronunciation. In addition, while the students are reading the passage, the teacher often checks their understanding of the meaning of words by asking them to give the Arabic

translation of these words. This is usually done with no particular consideration given to strategies for vocabulary learning.

With respect to the Libyan majors of English at university level, the focus on vocabulary acquisition is not enough in classrooms. Teachers focus students' attention on other features of language, assuming that students can handle the task of vocabulary learning by themselves. These teachers also think that students joining university already have some knowledge of vocabulary gained from their study of English as a school subject in pre-college. Unfortunately, students joining English language departments usually come with very basic and limited vocabulary knowledge according to my experience as a teacher in the Libyan context for 10 years. Moreover, their focus on vocabulary is usually restricted to some modules like reading comprehension where vocabulary is an essential part which they will be asked about in final exams.

The focus on vocabulary at university level, the focus of this study, is usually in reading comprehension modules, especially in years 1 and 2. Students mainly meet new words in class. A typical lesson is usually introduced to students by asking them to read the text silently for a few minutes in order to build a general understanding. Although the teacher encourages students to discuss what they have read and understood in the classroom, many students are reluctant to participate in the discussion because they are not used to activities such as group discussion that encourage their participation. After discussion, the teacher usually points at some students to read aloud to ensure that students are able to read. Students would also have opportunities to ask teachers for meanings of the new words. Teachers usually try to explain the meaning in English first or they might use

Arabic when students could not understand. Teachers also provide students with correct pronunciation.

While teaching reading in university levels, I noticed that my students used a variety of VLS when they dealt with new words. When students were asked to read silently, some of them made use of dictionaries, others read forward and backward throughout the text, took notes on margins and underlined new words in their textbooks, exchanged information with one another to discover meaning and overcome their understanding problems, and asked teachers questions for clarification. With respect to the subjects of the current study such activities are usually done in class since all students in both campuses live at home and not on campus where they can discover meaning from group work by preparing readings together out of class.

Apart from reading comprehension modules, there is hardly any focus on vocabulary in other modules such as linguistics (theoretical linguistics), grammar and phonology. In teaching such modules, teachers only focus on other language features supposed to be covered in those modules. Although learners as English majors always encounter unknown words, they themselves have to solve their vocabulary problems in terms of discovering or consolidating meaning without any focus on VLS by teachers that would make the learning task easier for the students.

Indeed teachers may implicitly encourage the use of some VLS. At the basic and intermediate levels, a teacher usually makes the class repeat words aloud after him or her to learn pronunciation. As a class activity or homework, students are quite often asked to write down a list of new words and memorize them. This implicitly encourages verbal

and written repetition as strategies for them to be used out of class. Also at university level, VLS are not explicitly taught; however, learners may adopt certain VLS because of teachers' emphasis on them. For example, when teachers are unwilling to give meaning of an unknown word, they may ask students to look it up in a dictionary. In addition, modules such as translation encourage extensive use of bilingual dictionaries when doing translation tasks as class activities or as homework.

In terms of teaching methods, the style of study in the Libyan education system in general is teacher-centred where learners still view themselves as passive human beings who respond to what they have received from their teachers. There is no focus on group work where students can work in groups, although teachers have enough room to select the material to be taught and the way they teach, as long as they cover the intended content of the syllabus. Teachers at university do not have any preset guidelines to follow in their choice of materials. The assumption among university staff is that any teacher is responsible for providing the relevant materials for his/her students taking into account students' year of study and students' progress through the four-year program of study.

There are no specific textbooks assigned for the modules except for a few modules such as grammar and phonology. Teachers usually depend on their own materials since the resources for English language are limited. Books or other printed materials are not available in library for students to consult. So teachers are the main source for providing such materials. They select the relevant materials from books and other resources such as newspapers, magazines, and articles relevant to each area of study. This means that there are some differences between campuses in what students have studied although they belong to the same university as is the case of the subjects of the current study.

Due to pressures of time, the need to cover the syllabus, examinations and class size, teachers in basic and intermediate levels encounter difficulties when engaging some teaching activities such as group work. Supervisors in schools always overstress the importance of covering the syllabus, and force teachers to speed up. Nevertheless, some prescriptive traditional teachers in basic and intermediate levels exaggerate the importance of covering the syllabus, even if that is at the expense of learning/teaching quality. It is also true that class size imposes its own constraints which may negatively affect the quality of teaching; students in large classes have fewer chances for class participation compared with smaller classes. It would also be difficult for teachers to monitor all their students' performance in such large classes during a limited class time.

On the other hand, teachers, especially in basic and intermediate level, might argue that students will be examined in due course, and helping each other by working in groups, for instance, does not reflect the reality of examinations. So, more focus is given on the tests students have to take eventually by both teachers and students. This is reflected on the students way of learning when they join universities; it is not uncommon for Libyan university teaching staff to be asked in the first day of school questions like what will be in the exam or how the exam looks like. But we as teachers should focus on how we help our students to learn. Simply, our main role is teaching not testing.

1.4. Hypothesis:

In general then the thesis will attempt to test the idea that the vocabulary knowledge of Libyan majors of English in Libyan universities is not sufficient for their needs because:

- They do not use a range of vocabulary learning strategies (VLS)
- They are unaware of a range of VLS.

- They limit themselves to certain VLS (rote strategies) rather than using many VLS.
- They do not effectively use certain VLS.

It will therefore contribute to the field of second language acquisition research by looking at the factors specific to a particular learning and teaching situation.

1.5. Organization of the study

This thesis consists of seven chapters: Chapter 1 (This Chapter) presents the background to the study, focus and motivation of the study, context, and hypothesis.

Chapter 2 presents the academic background to vocabulary research; it reviews the literature relevant to the present study which is divided into three main sections: language learning strategies (LLS), vocabulary learning strategies (VLS), and vocabulary knowledge. The first section provides a general overview of LLS where features of LLS, strategies of successful and unsuccessful learners, some factors affecting use of LLS, and taxonomies of LLS are presented; the second section discuses VLS and some taxonomies of VLS and studies conducted on the area of VLS; the third section outlines some key issues related to vocabulary knowledge such as the receptive/productive division and vocabulary frequency levels followed by a brief research in vocabulary knowledge. Then background to vocabulary testing is outlined.

Chapter three deals with the methods used to conduct this study. It explains the following main issues: the research questions, the research design, the instruments used for data collection, the pilot studies undertaken in UK and Libya, the main study which includes

sampling and subjects, the procedures for data collection and data analysis, and finally the ethical issues to be taken into consideration.

Chapter four presents the analysis of the Vocabulary Learning Strategies Questionnaire (VLSQ) as well as the interviews data that provides more details about the learners' responses to the VLSQ items. The analysis includes the subjects' use of 44 VLS categorized under five categories: (1) determination strategies, (2) social strategies, (3) memory strategies, (4) cognitive strategies, and (5) metacognitive strategies, as described in Chapter two, Section 2.2.1.3.

Chapter five is assigned for analyzing the results of the three vocabulary tests (VLT, CPA, FPA) used for measuring the subjects' vocabulary knowledge. It also describes the relationship among these three measures, and their relationship to the VLS used by the Libyan EFL students. Then, it presents the results of the motivation test.

Chapter six discusses the results of the data collection analyzed in chapter 4 and 5. It discusses the quantitative part of this study concerning the findings of the VLSQ and the learners' vocabulary knowledge obtained through the three vocabulary knowledge measures (VLT, CPA and FPA). It also discusses the findings of the qualitative part that deals with the findings of the group interviews.

Chapter seven: conclusion and implications, is dedicated to summarizing the outcomes of the current study and their pedagogical implications which could be drawn from this research. It ends with outlining the contribution of the study to knowledge, the limitations

of the study and recommendations for further research in the area of VLS and vocabulary knowledge.

In the following chapter (Chapter 2) I will review the literature relevant to VLS and vocabulary knowledge. The focus will be particularly on some key concepts related to VLS and vocabulary knowledge; they respectively include three main sections: language learning strategies (LLS), vocabulary learning strategies (VLS), and vocabulary knowledge. These key concepts will increase my understanding of the VLS and will also direct the research questions for this study.

CHAPTER TWO

Academic Background to Vocabulary Research

This chapter presents the key concepts relevant to vocabulary learning strategies (VLS) research, the main focus of the present study. It is divided into three main sections: the first deals with language learning strategies (LLS) in general, the second presents vocabulary learning strategies (VLS) and the third presents some key issues related to vocabulary knowledge.

2.1. Section One: Language Learning Strategies (LLS)

Originally "strategy" is a military term (Oxford, 1990) used to refer to plans for military operations. In terms of school learning, learning strategies refer to behaviours or actions a learner takes to make the learning processes easier and to achieve the best results. The interest in learning strategies emerged after the emergence of cognitive psychology since the 1960s when there were arguments against behaviourism that perceived learners as passive human beings who respond to what they have received (Knapp, 1986). In relation to learning strategies Wittrock (1979) stressed two main principles of cognitive psychology: individual responsibility and constructed meaning. The former signifies the shift of the responsibility of learning from the teacher to the learner; the latter identifies the processes taking place inside the brain. Since then the focus of researchers has changed from teacher-centred to more learner-centred approaches in which learners have been viewed as active processors. This interest has also shifted from a restricted concentration only on what students have learned, i.e. *product* or *outcome* of language learning to a more expanded focus on how these students learn language, i.e. the *process* by which learning takes place (Oxford, 1990, p. 5). This led to enormous studies on

language learning strategies (LLS) which have been defined differently by different researchers.

Wenden (1987a) views LLS as including three elements: (1) "language learning behaviours learners actually engage in to learn and regulate the learning of a second language", (2) "what learners know about the strategies they use", and (3) "what learners know about aspects of their language learning other than the strategies they use" (PP. 6-7). O'Malley and Chamot (1990, p. 1) define learning strategies as "the special thoughts or behaviours that individuals use to help them comprehend, learn, or retain new information". Oxford (1990) defines learning strategies as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations (p.8). Cohen (1998, p. 5) defines second language learner strategies as those that "encompass both second language learning and second language use strategies. Taken together, they constitute the steps or actions consciously selected by learners either for the learning of a second language, the use of it or both". From the aforementioned different views towards LLS, we can infer that there are different opinions among researchers about what the concept of learning strategies refers to, but most researchers would agree that learning strategies in general concern behaviours used by learners to learn a L2. Providing more information about LLS, Oxford (1990) lists the following features of LLS as shown in table 2.1 below:

Table 2.1: Features of language learning strategies:

Language Learning Strategies
1. Contribute to the main goal, communicative competence
2. Allow learners to become more self-directed.
3. Expand the role of the teacher.
4. Are problem oriented.
5. Are specific actions taken by the learner.
6. Involve many aspects of the learner, not just the cognitive.
7. Support learning both directly and indirectly.
8. Are not always observable.
9. Are often conscious.
10. Can be taught.
11. Are flexible.
12. Are influenced by a variety of factors.

(Oxford, 1990, p. 9)

2.1.1. Factors Affecting Use of LLS

A growing body of research indicates that the range and frequency of learning strategy use can be affected by various factors (Oxford and Nyikos, 1989; Oxford and Burry-Stock, 1995; Green and Oxford, 1995; Wharton, 2000). For the purpose of the present study, only three factors including motivation, language learning setting and strategy training will be briefly discussed. Strategy training will be dealt with later in Section 2.3.3.1, page 50. Age and gender are also considered but are not important factors as far as the subjects of this study are concerned because the subjects reflect the actual age of university students (20 to 23) and represent mostly females (100 females and 12 males). This discussion may help explain why Libyan EFL learners select certain VLS.

2.1.1.1. Motivation

Although there has been no consensus among researchers in defining precisely what the term 'Motivation' means, most researchers would agree that motivation "concerns the

direction and magnitude of human behaviour" (Dornyei, 2001, p. 8). The most widely known pair of orientations associated with Gardner's (1985) work in the L2 field is known as *integrative* and *instrumental*. The former is defined as "motivation to learn a second language because of positive feelings toward the community that speaks the language" (Gardner, 1985, pp. 82-3); the latter refers to motivation to learn a L2 for the sake of obtaining some benefits of L2 proficiency such as getting a job.

Crookes and Schmidt (1991) identified four factors that build the internal structure of the motivation to learn a language: (1) interest in the subject, (2) relevance to personal needs, (3) expectancy of success or failure, and (4) perception of the value of the outcomes. They named three external factors of motivation as well: (1) decision to learn the language, (2) persistence over a long period, and (3) high activity level. The missing of any of these factors will negatively affect the learners' motivation to learn a language (Scarcella and Oxford, 1992). They gave an example when class activities are uninteresting or irrelevant, learners' involvement in such activities will be deliberately reduced.

Cook (2001) measured school children motivation to learn a L2 in five countries: Belgium, England, Poland, Singapore and Switzerland; the five groups obtained high scores for both types (integrative and instrumental) of motivation with relatively higher scores for the integrative motivation (percentages for integrative ranged from above 70% to about 90%, for instrumental around 70%). Gardner (1985) states that there has been inconsistency among the relationships between motivation and language learning outcomes found in several studies, and claims that "not everyone who values another community positively will necessarily want to learn their language" (p. 77). A review of

some studies (see Gardner and MacIntyre, 1993) suggests that the results concerning the relationship between learners' motivation and L2 achievement are unclear and insubstantial.

However, this does not devalue the role of motivation in L2 learning, because a growing body of research suggests that highly motivated learners use a greater variety of learning strategies which can lead to success in language learning than those who limit themselves to a few learning strategies (Ahmed, 1989; Oxford, 1990; Sanaoui, 1995; Gu and Johnson, 1996). Dornyei and Clement (2000 cited in Dornyei, 2001) found in a large scale nationwide study conducted in an EFL setting in Hungary that integrativeness was the most effective variable in the participants' strategy choice as well as their general level of effort devoted for the learning process. Cook (2001, p.118), summarizes his discussion of motivation and L2 learning in the following points:

- Both integrative and instrumental motivations may lead to success, but lack of either causes problems.
- Motivation in this sense has great inertia.
- Short-term motivation towards the day-to-day activities in the classroom and general motivations for classroom learning are also important.

2.1.1.2. Language Learning Setting

"The difference between learning a second language and learning a foreign language is usually viewed in terms of where the language is learned and the social and communicative functions the language serves there" (Oxford, 1990, p. 6). In a second language setting these social and communicative functions are utilized immediately within the community where the second language is learned, whereas in a foreign

language setting, these functions are not used immediately within the community where the foreign language is learned, and usually used somewhere else (ibid) as is the case in the Libyan setting. These differences could influence the range and frequency of use of LLS. EFL learners learning English in a non-English speaking environment such as Libya may use different LLS from ESL learners' who learn English in an English speaking environment. When language is learned in an ESL setting, learners have more opportunities to use more learning strategies such as talking to native speakers and using different media sources. In an EFL setting where exposure to a L2 is less and the classroom is the solely source of input, EFL learners need more effort invested in memory strategies in order to learn and remember as much vocabulary as possible, for instance. They also need to be aware of the range of strategies they can adopt. The gap in exposure between classroom exposure and naturalistic exposure to L2 is vast; Singleton (1989) estimates that classroom exposure needs 18 years to provide the same quantity of L2 input as only one year of naturalistic exposure.

2.1.2. Taxonomies of LLS

Many researchers have studied LLS and classified them under diverse categories (Rubin, 1987; Cohen, 1990; O'Malley and Chamot, 1990; Oxford, 1990). O'Malley and Chamot (1990) distinguished three types of strategies: (1) cognitive strategies, (2) metacognitive strategies, and (3) social/affective strategies. They define cognitive strategies as those which "operate directly on incoming information, manipulating it in ways that enhance learning"; metacognitive strategies as those which "are higher order executive skills that may entail planning for, monitoring, or evaluating the success of a learning activity" (p. 44); and social/affective strategies as those which "represent a broad grouping that involves either interaction with another person or ideational control over affect" (p. 45).

Based on a series of research projects, Oxford (1990) produced the Strategy Inventory for Language Learning (SILL), a method to assess learning strategies, which includes six strategy categories, classified as direct strategies for dealing with the new language or indirect strategies for managing learning processes. The direct strategies include "memory strategies for remembering and retrieving new information, cognitive strategies for understanding and producing the language, and compensation strategies for using the language despite knowledge gaps" (p. 14). The indirect strategies include "metacognitive strategies for coordinating the learning process, affective strategies for regulating emotions, and social strategies for learning with others" (p. 15). In total, there are 121 items which are based on five-point Likert scale:

1. Never or almost never true of me
2. Usually not true of me
3. Somewhat true of me
4. Usually true of me
5. Always or almost always true of me

Macaro (2001) describes the direct strategies as subconscious (or less conscious) and the indirect strategies as conscious. He also states that it is not easy to distinguish between what is conscious and what is subconscious. Rather he looks at these strategies as a continuum of both types of strategies: the direct strategies at one end and the indirect strategies at the other. He writes:

> Those strategies at one end {direct strategies} tend to be deployed in direct relationship to the learning task, usually in immediate response to teaching instructions or to written or spoken text. Those at the other end {indirect strategies} tend to be deployed in preparation for, or subsequent to, a learning task or set of tasks, often at some distance removed from direct input and with the learner more in control of their learning.

Macaro placed some strategies used by learners (e.g. linking words to visual images and grouping certain lexical items) at the more direct end of the continuum, other strategies

(e.g. repeating words to oneself, memorizing a list of vocabulary) in the middle of the continuum, and other strategies (e.g. making mental association between words and objects, practicing with a friend) at the more indirect end of the continuum.

Oxford (1990) also claims that there is a large overlap among the strategy groups she classified. She gives an example of the overlap existing between the cognitive and metacognitive strategies: "the metacognitive category helps students to regulate their own cognition by assessing how they are learning and by planning for future language tasks, but metacognitive self-assessment and planning often require reasoning, which is itself a cognitive strategy" (p. 16). There is consensus among some researchers regarding the overlap among strategies; Cohen (1990) supports Oxford's claim in this respect confirming that the distinctions are not so clear-cut. Cohen claims that some strategies in some tasks can be interpretable as both cognitive and metacognitive strategies. He writes:

> In fact, the same strategy may function at different level of abstraction. For instance, skipping an example in the text so as not to lose the train of thought may reflect a metacognitive strategy (i.e. part of a conscious plan to not get distracted by detail) as well as a cognitive strategy to avoid material that would not assist in writing, say a gist statement for the text" (pp. 15-16).

In general, research on language learning strategies started with finding out how good language learners approach learning, and gradually moved to exploring the differences between successful and unsuccessful language learners in terms of strategy use. The following section deals very briefly with the learning strategies of successful and unsuccessful learners.

2.1.3. Research on LLS

Since the current study focuses particularly on vocabulary learning strategies, only a brief summary of the findings of research on learner strategy will be provided. The research on good language learners is traced back to the seventies when it started with the studies of Rubin (1975) and Stern (1975). After these initiatives, a large amount of research into learner strategies conducted by many researchers (e.g. Rubin, 1987; O'Malley, 1987; Wenden, 1987b, 1987c; Oxford, 1989, 1990, 1993; Oxford and Cohen, 1992; O'Malley and Chamot 1990). These studies yielded conclusions that differences between successful and unsuccessful language learners could be caused by quantity or quality of learning strategies or combination of both. The following is a very brief discussion of the findings of some studies regarding successful and unsuccessful language learners' strategies.

Naiman et al.'s (1996) study used interviews to elicit information from 34 adult successful language learners and 72 high school students representing good and poor language learners; they conclude that "there are many individual ways of learning a language successfully" (p. 103). In other words, individual differences do exist among learners in terms of LLS and what works well for some learner may not work as well for another. Using students' grades to divide successful students from the unsuccessful ones, Reiss (1983) stated that students' responses to a self-report questionnaire were significantly different; the unsuccessful students relied mainly on classroom material and used only general strategies, whereas the successful students utilized more specific strategies that involve originality and creativity. Most importantly, Reiss suggested that these differences are a matter of quality of learning strategies rather than quantity. Vann and Abraham's (1990) study supported the suggestion of quality of strategies; they stated that although the unsuccessful learners used many of the strategies used by the successful

learners, the unsuccessful learners failed to apply some metacognitive strategies (see Section 2.2.1.3 in this Chapter, for definition of metacognitive strategies) that are appropriate to the task they are involved in. In this respect, Macaro (2001, p. 264) concludes that "one thing seems to be increasingly clear and that is that, across learning contexts, those learners who are pro-active in their pursuit of language learning appear to learn best".

Macaro (2006, pp.320-21) summarizes the results which are based on the practical applications offered by what he calls four often-cited books (Naiman et al., 1996; O'Malley and Chamot, 1990; Oxford, 1990; Wenden and Rubin, 1987) and the empirical studies:

1. There are correlations between strategy use and language learning success.
2. Differences in strategy use exist among groups (e.g. males and females) as well as individuals.
3. Although methods for collecting data in terms of learning strategies are inadequate, they still have satisfactory level of validity and reliability; questionnaires can give a broad picture, while "verbal reports (think-aloud techniques and task-based retrospectives) effectively yield insights into skill-specific or task-specific strategy use" (Macaro, 2006, p. 321).
4. Learners' strategy training seems to play a useful role in developing successful language learning.

In general quite a lot of research has been conducted on learner strategies as individuals or as groups. However, most of the research on the more specific area of vocabulary learning strategies (VLS) has focused on individual strategies with only few studies

investigating the VLS as a whole (Schmitt, 1997). Therefore, studies investigating the VLS used by EFL/ESL learners will be the base for the theoretical background of the current study which investigates the VLS used by the Libyan EFL learners and their vocabulary knowledge.

2.2. Section Two: Vocabulary Learning Strategies (VLS)

In spite of the great role vocabulary plays in language learning and the importance of vocabulary for language learners, "in the literature of English language teaching and learning a recurring theme has been the neglect of vocabulary" (Hedge, 2000, p. 110). She adds that this neglect mismatches with the importance given to vocabulary learning by learners themselves. This neglect of vocabulary is also surprising in view of the fact that more misunderstanding can occur due to errors related to vocabulary than those related to grammar (Ibid). However, in recent years, there has been great awareness by researchers, materials designers, and teachers regarding vocabulary learning. Hedge outlined an agenda of questions needed to be addressed; the questions include the following:

- What strategies do learners use to acquire new words or to retain them?
- What exactly do learners learn about a word when they acquire it?
- How is a second language learner's mental lexicon organized and how does it develop over time?
- In the initial stage of learning a foreign language, which words are the most useful to learn?
- Why are some words easier to learn than others?

The first thing that will attract learners' attention when they come across vocabulary learning strategies (VLS) is simply memorization of the new words. Most learners tend to use simple memorization, repetition, and taking notes of vocabulary (Schmitt, 2000), and favour them over the complex ones involving a significant effort required for manipulating information (e.g. imagery, inferencing, Keyword Method) (O'Malley and Chamot, 1990; Schmitt, 2000). Furthermore, learners may not be aware of the various vocabulary learning strategies they could use in order to develop their vocabulary acquisition. Schmitt refers to simple strategies as *shallow* and the complex ones as *deep*. Cohen and Aphek (1981) state that shallower activities can be more appropriate for beginners, because they do not include more material that may cause distraction for learners; while deeper strategies that usually include context can be more beneficial for intermediate and advanced learners. Moreover, for deep strategies such as guessing from context to be used efficiently, a certain level of vocabulary knowledge is required (Laufer, 1997b).

2.2.1. Taxonomies of VLS

In this section, a particular attention will be paid to Schmitt's (1997) taxonomy of VLS since the taxonomy for the current study is mainly based on it. Other researchers involved in classifying VLS include Stoffer (1995) and Nation (2001).

2.2.1.1. Stoffer's (1995) Taxonomy

Stoffer (1995) produced the Vocabulary Learning Strategy Inventory (VOLSI) which included a questionnaire containing 53 items designed to assess specifically vocabulary learning strategies. She used factor analysis to classify the categories. The 53 items were

clustered into nine categories as follows:

1. Strategies involving authentic language use.
2. Strategies used for self motivation.
3. Strategies used to organize words
4. Strategies used to create mental linkages.
5. Memory Strategies.
6. Strategies involving creative activities.
7. Strategies involving physical actions.
8. Strategies used to overcome anxiety.
9. Auditory strategies.

Since she used actual data from learners to create her categories of VLS, the factors might be specific to her idiosyncratic sample. This approach made the classification seem to be irrelevant (Tseng et al., 2006); in other words, many of the VOLSI items for a particular factor look unrelated to each other.

2.2.1.2. Nation's (2001) Taxonomy

Nation's taxonomy for VLS is based on three main classes of VLS: (1) planning (2) sources, and (3) processes. Table 2.2.1.2 below illustrates what types of strategies each class includes. See Nation, 2001, pp. 218-222 for information about each type of strategies.

Table 2.2.1.2: A taxonomy of kinds of vocabulary learning strategies

General class of strategies	Types of strategies
Planning: choosing what to focus on and when to focus on it	Choosing words Choosing the aspect of word knowledge Choosing strategies Planning repetition
Sources: finding information about words	Analyzing the word Using context Consulting a reference source in L1or L2 Using parallels in L1 and L2
Processes: establishing knowledge	Noticing Retrieving Generating

Nation (2001, p. 218)

2.2.1.3. Schmitt's (1997) Taxonomy

Schmitt's (1997) taxonomy of VLS, which was basically based on Oxford's (1990) social, memory, cognitive and metacognitive categories, lists 58 VLS (see appendix 1). Such a large list becomes unmanageable unless it is categorized in some way; thus, Schmitt distinguished (1) the discovery strategies that are "useful for the initial discovery of a word's meaning" from (2) the consolidation strategies that are "useful for remembering that word once it has been introduced" (Schmitt, 2000, p. 135). In addition, these strategies were further classified into five groups. The discovery category includes *determination and social* strategies. The consolidation category includes *social, memory, cognitive*, and *metacognitive* strategies. Although Oxford's taxonomy was generally suitable, it failed when categorizing "vocabulary-specific strategies" (Schmitt, 1997, p. 205) in many respects. Most importantly, Schmitt states that in Oxford's taxonomy there is no category describing what kind of strategies a learner uses when s/he first encounters the meaning of a new word. Therefore, Schmitt added a new category for these strategies, called *Determination Strategies*.

The five categories of strategies were defined by Schmitt (1997) as follows: *determination strategies* are "used by an individual when faced with discovering a new word's meaning without recourse to another person's expertise" (p. 205). This can be through e.g. guessing from their knowledge of language learning, guessing from the mother tongue, guessing from context, or consulting reference materials (Schmitt, 2000). *Social strategies* are used when one asks other people (e.g. classmates, teachers) to understand a word. *Memory strategies* entail linking the word to be learned with some previously learned knowledge, "using some form of imagery and grouping" (Ibid, p.135). The definition of *cognitive strategies* was adopted from Oxford (1990) as "manipulation

or transformation of the target language by the learner" (p.43). They are the same as memory strategies although they are "less obviously linked to mental manipulation" (Schmitt, 1997, p. 206); they include repetition and using mechanical means to study vocabulary, such as using vocabulary notebooks. Finally, *metacognitive strategies* involve "a conscious overview of the learning process and making decisions about planning, monitoring, or evaluating the best ways to study" (Schmitt, 1997, p. 205).

Some researchers criticise the taxonomies of LLS as well as VLS. One criticism of Oxford's SILL is that its items are more specific (each item concerns one learning strategy) and include scale descriptors indicating the frequency of strategy use. Tseng et al. (2006) argue that since the items of the SILL are behavioural so linear relationship cannot be assumed between the score of each item and the total score. For example, one can be inactive in using cognitive strategies in general while having high scores in some items in the cognitive scale. "Thus the scales in the SILL are not cumulative and computing mean scale scores is not justifiable psychometrically" (p. 82). This can also be applicable to Schmitt's (1997) taxonomy which is basically based on Oxford's (1990). In addition, in Schmitt's taxonomy, like most of LLS taxonomies, there is a degree of overlap between the categories which makes it difficult to distinguish between them. Taking this into consideration, this study dealt with not only the broader categories of VLS but also each individual strategy in terms of results and interpretation.

Yet, comparing Schmitt's taxonomy with others like Nation's and Stoffer's, Schmitt's can be considered the most comprehensive one since it includes almost everything mentioned in the previous taxonomies. Above all creating a VLS taxonomy that covers everything is not attainable task, simply because learning L2 vocabulary is a mental

process and cannot be distinguished from the language learning strategies in general (Schmitt, 1997). Therefore, the taxonomy for this study was mainly based on Schmitt's (1997) taxonomy of vocabulary learning strategies which is in turn based on Oxford's (1990) Strategy Inventory for Language Learning (SILL) Which has been widely used for assessing EFL/ESL learners' language learning strategies in various contexts. Oxford and Burry-Stock (1995) claim that "within the last 10-15 years the SILL appears to be the only language learning strategy instrument that has been extensively checked for reliability and validity in multiple ways" (p. 4).

2.2.1.4. Discussion of the Taxonomy of VLS

The following is a brief description of most of the VLS included in the present study's VLSQ which was mainly based on Schmitt's (1997) taxonomy (see appendix 2 for the taxonomy of the current study).

2.2.1.4.1. Discovery Strategies

As mentioned above, the category of discovery strategies concerns the initial discovery of a word's meaning. It includes *determination and social* strategies.

- **Determination Strategies**

Learners use these strategies when they first encounter a new word. They try to discover its meaning through guessing from their knowledge of the language, guessing from the mother tongue, guessing from context, or consulting reference materials (Schmitt, 1997). According to Scholfield (1999, p. 16), there are the three essential types of strategies that learners can choose from to deal with any unknown word they face while reading:

(a) Skipping, i.e. not finding out what the word means at all.

(b) Guessing or, as it is known more technically these days 'inferencing'. This can be guessing from context, or from a native language word that seems similar (e.g. a Spanish learner guesses the meaning of *punctual* from *puntual*) or from internal derivation or compounding clues (e.g. a reader spots the two familiar elements in *toyboy* and tries to guess what it means from that), or from the non-linguistic clues present in a picture accompanying the text.

(c) Appealing to another person who may know the word, a glossary with the text, or of course a dictionary.

-Guessing from textual context

"Incidental learning via guessing from context is the most important of all sources of vocabulary learning" (Nation, 2001, p. 232). This is based on the belief that this is the way native speakers learn their L1, suggesting it could successfully be applied to EFL/ESL language learners too. Yet, guessing involves that learners should have knowledge about available contextual clues that help them guess successfully. Clarke and Nation (1980, p. 211) have listed the following steps for guessing:

Step 1. Determining the part of speech of the word;
Step 2. Looking at the immediate grammar;
Step 3. Studying the wider context (usually the conjunction relationship);
Step 4. Guessing the word and checking the guess.

However, knowing guessing strategies does not guarantee successful guessing. According to Laufer (1997b, p. 24), "the level at which good L1 readers can be expected to transfer their reading strategies to L2 is 3,000 word families, or about 5,000 lexical items". The 3,000 word families provide about 95% text coverage which can enable learners make successful guessing. She adds, guessing can be negatively affected by some factors such

as: (1) unavailability of contextual clues, (2) unfamiliarity with the words that presumably provide the clues, (3) existence of misleading or partial clues, and (4) incongruity between the reader's background knowledge (content schemata) and the text content. Research, thus far, tends to highly evaluate the effectiveness of incidental vocabulary learning through reading and listening (Krashen, 1989), but as aforementioned, it is not easy for ESL/EFL learners, especially for those with a limited vocabulary size who face difficulties understanding even the words that would presumably provide the clues for any unknown word. Consequently, these learners will be prohibited from using such unknown clues.

The learners' L1 vocabulary knowledge has an impact on the use of guessing. This knowledge can only be successfully used in guessing if the two languages (L1 and L2) related to each other, or "one has borrowed lexical items extensively from the other" (Read, 2000, p. 57), for example, English and French. Many English words, especially the academic section words can be easily guessed by speakers of Romance languages, since they "are based on Latin or Greek roots and affixes" (Schmitt et al., 2001, p. 68). However, L1 knowledge cannot benefit learners if their L1 is far from the L2 they are learning as is the case of Arabic learners of English who rarely have any cognates to make use of. Meara (1993) mentioned some cases of cognacy amongst them two which he referred to as simple cases:

1. The first simple case is where L1 and L2 share very few cognates, for example, Arabic and English; this is the most common case; for those learners vocabulary acquisition would be a difficult task.
2. The second simple case is where L1 and L2 are close to each other, for example, Italian and Spanish; vocabulary acquisition in this case could be an easy task.

-Consulting a reference source

Various external sources from which learners can obtain information about a word are available for learners. Nation (2001) subdivided them into two main sources: (1) formal sources, usually written, including dictionaries, glossaries, lists, concordances, and (2) more spontaneous sources, usually oral, including asking teachers, native speakers or other learners for information. As for dictionary use, it appears that L2 language learners tend to use bilingual dictionaries more frequently than their monolingual dictionary counterparts (Schmitt, 1997). This occurs in spite of the fact that monolingual dictionaries provide more information for learners compared to bilingual dictionaries. Schmitt suggested that "one way around this contradiction is to include more and better information in future bilingual dictionaries" (p. 210) as is the case in monolingual dictionaries where information is regularly updated and improved according to learners expectations and needs.

Some studies (e.g. Bensoussan et al., 1984) revealed that there was no difference between learners who used dictionaries and those who didn't in terms of success in a reading comprehension test. However, this does not indicate that dictionary use is not a good strategy; the important thing for learners as dictionary users would not be the frequency of dictionary use so much as the efficiency in using it. Dictionaries should accompany the use of other strategies such as guessing on the same unknown word (Scholfield, 1999), rather than being used as an alternative strategy. Thus, Learners should know and be taught when and how to use dictionary competently through raising their consciousness of the reasons behind selecting the dictionary use for their lexical problems (ibid).

-Analyzing affixes and roots

Learners can use their knowledge of word parts (roots and affixes) to give them clue to its meaning (Schmitt, 1997). Knowing word parts can help learners learn the new words by relating them to known words or to known prefixes and suffixes, because the majority of the forms of content words can be changed by adding prefixes and suffixes. Knowing word parts can also be used for checking whether learners' guessing from context is accurate (Nation, 2001). Nation (1990, pp. 169) outlined three skills a learner needs in order to make use of affixation: breaking a new word into parts so that the affixes and roots are revealed; knowing the meaning of the parts, and being able to connect the meaning of the parts with the meaning of the word.

- **Social Strategies**

In terms of discovery strategies, social strategies used by language learners involve asking someone who could help learners discover the meaning of new words. In doing so, EFL learners quite often ask their classmates and/or teachers to provide them with a variety of information such as a word L1 translation, synonym, explaining the meaning, giving a sentence including the new word, or a combination of all these strategies (Schmitt, 1997).

2.2.1.4.2. Consolidation Strategies

The category of consolidation strategies concerns strategies used for remembering a word once it has been introduced. It includes *social, memory, cognitive*, and *metacognitive* strategies.

- **Social Strategies**

Some social strategies are used by learners as consolidation strategies where learners work as a group to learn and practice vocabulary. Dansereau (1988) mentions some of the advantages of group learning: it encourages active processing of information; the social context motivates the participants to learn; learning in groups can promote team activities even outside the classroom; due to less intervention from teachers, students have more opportunities to use language in class. Learners can also ask teachers to check their vocabulary lists for accuracy. This strategy is less frequent (Schmitt, 1997) because learners usually create their vocabulary lists outside of class, so the learning which involves such strategies can be considered as independent learning. In general, the use of social strategies was found to be extremely limited according to the findings of some studies such as O'Malley and Chamot (1990).

- **Memory Strategies**

Memory strategies (traditionally called mnemonics) entail linking the word to be learned with some previously learned knowledge, "using some form of imagery and grouping" (Schmitt, 2000, p.135). This integration of the new knowledge with the existing that has been previously learned, involves some sort of attention and processing that should be given to the newly learned item which is essential for long-term retention as suggested by the Depth of Processing Theory (Craik and Lockhart, 1972, Craik and Tulving, 1975). In this respect, Bahrick (1984) states that to learn something well depends on how deeply people process it. He adds that the important thing in learning is not how often the word is practised so much as how it is practised.

Research on VLS identified a considerable number of memory strategies; Schmitt's

(1997) taxonomy included 26 memory strategies from which he included 18 on the initial list used in his survey on Japanese learners. I will use some of the terms under which he subcategorized memory strategies in his discussion of taxonomy.

-Pictures/Imagery

Language learners can make pictures in their minds of the new word's meaning. Since imagery has proved to be more effective in learning than only repetition for reading passages (Steingart and Glock, 1979 cited in Schmitt, 1997), it could also be successfully applied in vocabulary. Alternatively, learners can connect the newly learned words to their special personal experience.

-Related words

Using sense relationship, learners can link between what they already know in terms of words and their newly learned words. This linking can be through coordination (dog — other kinds of animals, cats or wolves), synonymy (beautiful - gorgeous), antonymy (hot – cold). Using scales for gradable adjectives is another strategy of linking words to each other. Putting such adjectives in a scale (huge, big, medium, small) would help learners remember them (Schmitt, 1997).

-Word's orthographical or phonological form

Other memory strategies that facilitate remembering for learners are focusing on the orthographical and/or phonological form of the word: VLS like explicitly studying the spelling or the sound of the word, i.e. pronunciation can make remembering words easier (Schmitt, 1997). Alternatively, learners can make an image of the form of the word and/or say the word aloud when studying. Nation (2001) calls these processes noticing.

The keyword Method is another strategy that can help learners remember new words. Using this strategy involves finding an L1 word or phrase sounding like the L2 word, for example, for the English word 'farmer' the Arabic phrase *far mar* (a mouse passed by), then creating an image combining the two concepts, such as a farmer watching a mouse passing by in his farm. "When the L2 word is later heard, the sound similarity invokes the created image which prompts the L2 word's meaning" (Schmitt, 1997, p. 214). Some studies have demonstrated the efficacy of the Keyword method in helping with recall of the learned L2 words (e.g. Atkinson and Raugh, 1975; Pressley et al., 1982); however, in some recent studies (O'Malley et al., 1985; Chamot et al., 1987, Al-Fuhaid, 2004) this method was found to be infrequently used by learners.

-Other memory strategies

As one of the VLS, paraphrasing the meaning of the word can be multifunctional in that it can be used as a strategy for teaching the meaning of the new words, or as a communication strategy to compensate for lack of productive vocabulary. Furthermore, it can be used as a memory strategy "which improves recall of words by means of manipulation effort involved in reformulating the word's meaning" (ibid, pp. 214-15). Vocabulary acquisition can be developed by initially learning the words of an idiom (e.g. proverbs) together, i.e. memorizing the proverb, and then analyzing them as individual words; each idiom can be used as a mnemonic device for helping learners memorize its individual words (ibid). Another helpful strategy for consolidating meaning is using the newly learned words in sentences. L1 learners can intentionally create their own sentences using the newly learned words.

- **Cognitive Strategies**

O'Malley and Chamot (1990) define cognitive strategies as those which "are more directly related to individual learning tasks and entail direct manipulation or transformation of the learning materials" (p. 8). These strategies include verbal and written repetition of the new word over and over which are among the most familiar strategies all over the world (Schmitt, 1997); they are so deeply rooted in learners' minds that learners resist giving them up to utilize other ones (O'Malley and Chamot, 1990). In addition, learners can make their own lists of new words and keep vocabulary notebooks to support rehearsal. Making lists is usually used when learners first discover a word's meaning, but most learners keep using them for reviewing and studying later on. However, according to Laufer (1997a) L2 learners' use of word lists depends on their proficiency level; when learners think that they have arrived at a stage of learning that enables them to learn through exposure to L2, they might discontinue using word lists.

Many researchers value the importance of taking notes of the newly learned words inside or outside class and keeping vocabulary notebooks in learning and remembering words (McCarthy, 1990; Gairns and Redman, 1986). McCarthy affirms the importance of notebooks saying that they are beneficial in terms of spelling retrieval due to writing the new words down; they are also easy to carry and use at any time. Learners can also add to their notes and change or add new categories where necessary (Gairns and Redman, 1986). Learners can take notes in different forms: in the form of vocabulary notebooks, vocabulary cards, and simple notes along the margins or between lines; these notes offer learners opportunities for more exposure to the newly learned words during review (Schmitt, 1997).

- **Metacognitive Strategies**

The category of metacognitive strategies is the fifth category of Schmitt's (1997) divisions of VLS. According to O'Malley and Chamot (1990), metacognitive strategies "involve thinking about the learning process, planning for learning, monitoring for comprehension or production while it is taking place, and self evaluation after the learning activity has been completed" (p. 8). They highly value the importance of these strategies and call the students who do not use metacognitive approaches as "learners without direction or opportunity to plan their learning, monitor their progress, or review their accomplishments and future learning direction" (p. 8). If the learned language is English, using different sources of the L2 media like watching English TV channels (e.g. movies, songs, documentary), listening to English radio programmes, reading English newspapers and magazines, or using computer programs (e.g. internet) can help develop learners' vocabulary since these facilities offer more opportunities for learners to maximize their exposure to a L2.

Organizing one's time for revising the newly learned words is one of the metacognitive strategies which makes studying vocabulary more effective and facilitates the task of vocabulary learning. Revising newly learned words soon after the initial meeting and then revising them using spaced repetition can help remembering words because research shows that forgetting takes place as soon as the learning session ends, after that it gradually slows down (Schmitt, 1997). Thus, learners should organize and make schedules for their learning using spaced repetition. Russell (1979) proposes a schedule for reviews as follows: reviews start five to ten minutes after the end of learning session; then a day later; then seven days later; a month later; and finally six months later.

Continuing to study the word over time is amongst the strategies that help with the consolidation processes. However, learners should be selective in their vocabulary learning and be aware of what words are more beneficial for them to focus on. This, of course, has to do with frequency levels: whether the word is a high or low frequency one. There are many low frequency words that learners will never or rarely meet with again. Nation (1990, p. 141) proposes that learners should take some factors into account when they determine to learn or to skip a low frequency word:

1. Is it a necessary technical word for your field?
2. Does it contain affixes or a root which can help you learn it?
3. Is it repeated at least twice?

Gu (1994) states that successful learners most often skip an unknown word or delay dealing with it to a later stage when they believe that knowing the meaning of the word is not important for understanding the context where it occurs, whereas unsuccessful learners usually try to look up the meaning of every individual word they face.

Finally learners should try to assess their vocabulary knowledge (e.g. with word tests). Testing themselves would help them be aware of their vocabulary size on one hand and be aware of the efficacy of their VLS, whether they need to be changed and replaced by other possibly more effective ones on the other. But before dealing with research on relationships between the learners' VLS and their vocabulary knowledge, we need to describe the nature of vocabulary knowledge and define what it refers to.

2.3. Section Three: Vocabulary Knowledge

Before going any further in this respect, we have first to explain what is meant by a word or what is a word? In other words, what can be counted as a word? For

example, can we count *boy* and *boys* as one word or two?

2.3.1. What is a Word?

According to Nation (2001), many criteria can be used to determine how words can be counted including *tokens, types, lemmas,* and *word families*. These ways are units of counting that can answer different questions.

- *Tokens*

This way concerns counting every word that appears in a spoken or written discourse. Even if the same word is repeated twice in a sentence, it is counted as two words. Such words are called 'tokens', and used to answer questions such as how many words are there in a line or in this assignment?

- *Types*

'Types' is different from tokens in that a repeated word in a sentence is not counted again. Thus, a sentence of ten 'tokens' can include only eight 'types'. According to Nation and Meara (2002), some problems come up with what can be counted as types; for example, when we have two identical words with different meanings like *generation* (for electricity) and (the younger) *generation*, but, I think this is only normal since almost no English word has only one meaning.

- *Lemmas*

Levelt (1989) defines lemmas as consisting of the semantic and syntactic knowledge. The semantic knowledge concerns the meaning of a lemma; the syntactic knowledge includes the word's part of speech, its grammatical functions

and restrictions determining its use. More precisely, Nation (2001, p. 7) defines a lemma as "consist[ing] of a headword and some of its inflected and reduced (n't) forms". Inflections in English include plural, third person singular present tense, past tense, past participle, *-ing*, comparative, superlative and possessive (Bauer and Nation, 1993). Linguists in their frequency counts (e.g. The Thorndike and Lorge frequency count, 1944) depended on lemmas for counting. However, some linguists viewed what is included under a lemma differently, for example, the Brown Corpus (Francis and Kučera, 1982) excluded the comparative and superlative forms from the lemma.

- *Word families*

"A word family consists of a headword, its inflected forms, and its closely related derived forms" (Nation, 2001, p. 8). Like lemmas, the problem is what words to include in the word family. Learners with different proficiency levels would have a different understanding of word families; what is an intelligible word family for an advanced learner might not be so intelligible for an intermediate one. Nation asserts the necessity of making a scale for word families "starting from the most elementary and transparent members and moving on to less obvious possibilities" (p. 8).

Having provided some information about what a word can mean, the most relevant definition to the Libyans learners, the subjects of the current study, I think is lemmas. The Libyan learners usually focus on the word and some of its inflected forms; i.e. aspects like the part of speech and some grammatical functions of the word. After discovering meaning, learners would like to know some other aspects such as the word's

pronunciation, its part of speech in order to know how to use it in a sentence. They also use various VLS to know some aspects of knowing a word, for example, they use English/ Arabic dictionaries for discovering meaning, and English/English dictionaries for knowing correct pronunciation, synonyms and how to use a word in different sentences. Mentioning some aspects of word knowledge, the questions that might be raised in this respect is what does knowing a word mean? In other words, what aspects of vocabulary knowledge should a learner learn to acquire words?

2.3.2. What is involved in Knowing a Word?

Vocabulary knowledge is not an all-or-nothing phenomenon, that is, there is no sharp line distinguishing between knowing and not knowing a word because the concept of knowing a word has many dimensions (Richards, 1976; Nation, 1990). There are words learners have not learned yet or know only partially as well as words they know but are not always able to use or to access. Adopting some researchers' definitions of vocabulary knowledge and putting them in one, Laufer and Goldstein (2004) write:

> It has often been defined as the sum of interrelated "subknowledge"—knowledge of the spoken and written form, morphological knowledge, knowledge of word meaning, collocational and grammatical knowledge, connotational and associational knowledge, and the knowledge of social or other constraints to be observed in the use of a word (Nation, 1990, 2001; Richards, 1976; Ringbom, 1987 cited in Laufer and Goldstein, 2004, p. 400).

Richards (1976, p. 83) has offered a list of features that indicate the various dimensions of word knowledge. He writes:

- Knowing a word means knowing the degree of probability of encountering the word in speech or print. For many words we also know the sort of words most likely to be found associated with the word.

- Knowing a word implies knowing the limitations on the use of the word according to variations of function and situation.
- Knowing a word means knowing the syntactic behaviour associated with the word.
- Knowing a word entails knowledge of the underlying form of a word and the derivations that can be made from it.
- Knowing a word entails knowledge of the network of associations between that word and other words in the language.
- Knowing a word means knowing semantic value of a word.
- Knowing a word means knowing many of the different meanings associated with it.

In this respect, Cook (2001, pp. 61-2) states that a word is not just its meaning; there are other aspects involved in knowing a word. He used the word *man* as an example and explained what people who know English know about the word *man*:

-Forms of the word

- Pronunciation.
- Spelling.

-Grammatical properties

- Grammatical category.
- Possible and impossible structure.
- Idiosyncratic grammatical information.

-Lexical properties

- Word combination.
- Appropriateness.

-Meaning

- General meanings.
- Specific meanings.

For his new edition Cook is going to add derivation – *manly, mannish, manfully*, and so on (V. Cook, personal communication, April 24, 2007). He concludes his discussion asserting that acquiring a word is not simply making a link between its form and a translated meaning. "It is acquiring a complex range of information about its spoken and written form, the ways it is used in grammatical structures and word combinations, and several aspects of meaning" (p. 62). This does not mean that people must know all these aspects to know a word; nobody fully recognizes every aspect of a word. Thus, we can infer that vocabulary knowledge has many degrees of knowledge.

Teaching and teaching materials such as books, especially for beginners, have mostly been based on the high frequency words. Although the word frequency is important and relevant to teaching (see Section 2.5.1, later), it is only one factor that can determine what vocabulary chosen to teach; other factors include "the ease with which the meaning of an item can be demonstrated *blue* is easier to explain than *local*, and its appropriateness to what the students want to say *plane* is more useful than *system*" (Cook, 2001, p. 60). This, in turn has to do with teaching vocabulary, and raises the questions of whether vocabulary should be taught, and how?

2.3.3. Should Vocabulary be taught and how?

Although it is easy to find teachers who argue against teaching vocabulary and who assume that vocabulary can take care of itself (Nation, 1990), there is some convincing evidence that supports the importance of teaching vocabulary. Here I will summarize

what Nation (1990) views as strong reasons for a systematic and principled approach to vocabulary. First, research on vocabulary has provided us with considerable amount of information that can assist how we go about teaching vocabulary and what vocabulary we should focus on, so we can make sure that learners' effort on vocabulary will be beneficial. Second, there are many ways of presenting vocabulary in class, and teachers' dissatisfaction with some ways cannot be considered as an excuse for ignoring all the other ways that help learners develop their vocabulary learning. Third, both teachers and learners highly evaluate the importance of vocabulary in foreign and second language learning. Finally, learners face many difficulties in using a L2 because of lack of vocabulary.

Hence vocabulary is so important element in L2 learning and having provided some reasons for focusing on vocabulary in classrooms, now we will shed light on some ways of learning/teaching vocabulary. First, the distinction between what is called direct and indirect vocabulary learning is briefly outlined:

> In direct vocabulary learning, the learners do exercises and activities that focus their attention on vocabulary. Such exercises include word-building exercises, guessing words from context when this is done as a class exercise, learning words in lists, and vocabulary games. In indirect vocabulary learning the learners' attention is focused on some other feature, usually the message that is conveyed by a speaker or writer. If the amount of unknown vocabulary is low in such messages, considerable vocabulary learning can occur even though the learner's attention is not directed toward vocabulary learning (Nation, 1990, p.2).

The direct learning is usually referred to as intentional learning that includes learning words' definitions and translations intentionally, whereas the indirect learning is referred to as incidental learning which concerns learning from context such as learning from extensive reading, learning from participating in conversation, or learning from listening to others talking, listening to radio, or watching TV (Nation, 2001). He argues that a good

programme of language learning should have a balance of chances for learners to learn intentionally and incidentally; he also views these two types of learning as completing one another with the learning coming from each one strengthening the learning from the other.

Singleton (1999, p. 51) mentioned that the atomistic techniques (referring to learning words separately like using word lists) are beneficial for beginners in providing them with a "foothold in the L2 lexical system"; however, he adds, this type of learning does not guarantee learners' success in appropriately using the words in context. This definitely supports Nation's (1990) idea of the necessity of integrating the intentional and incidental learning of words in any language learning course to be successful. Nation (1990, p. 3) states that there are any of four ways into which vocabulary teaching can fit in a language learning course; they are listed from the most indirect to the most direct:

1. Material is prepared with vocabulary learning as a consideration.
2. Words are dealt with as they happen to occur.
3. Vocabulary is taught in connection with other language activities.
4. Time is spent either in class or out of school on the study of vocabulary without an immediate connection with some other language activity.

As we mentioned above that learning a word requires much more than learning its meaning and pronunciation, so teaching vocabulary should involve teaching the three aspects of form, meaning and use. Cook (2001, pp. 72-73) states that words are 'multi-faceted', and teaching vocabulary should include the following points:

- teaching basic-level words first;
- using components of meaning to teach some words;

- thinking about first presentation of the word as well as practice;
- not separating words from their structural context;
- exploiting the students' strategies for understanding and learning vocabulary;
- covering the many aspects of knowing a word, not all of which can be learnt at once.

The basic-level words, first point above mentioned, are easier to learn for learners based on the fact that children first learn basic words because "they reflect aspects of the world prototypes, that stand out automatically from the rest of what they see" (Cook, 1996, p.51). For example, *potatoes* is a 'basic level' word which is easier to learn first for learners than a 'superordinate level' word like *vegetables* or a 'subordinate level' like *sweet potatoes*. Figure 2.3.3 shows examples of the three levels of vocabulary:

Superordinate	Furniture	Bird	Fruit
Basic level terms	Table, chair	Sparrow	Apple, strawberry
Subordinate	Coffee table, arm chair	Field sparrow	Golden Delicious, wild strawberry

Figure 2.3.3: The three levels of vocabulary (Cook, 1996, p.52)

Meara (1993) asserts the individual differences in learning vocabulary saying that there is no specific strategy preferred by all learners. Hence, textbooks should be based on multi-methods of vocabulary learning to satisfy different learners' expectations. He adds, the solution for this problem is to make learners take control of their learning and be more independent by using whatever suits them; this means that new learners or beginners need to be exposed to a range of VLS from which they select what suits them, after being taught how to comfortably use them through strategy training sessions.

2.3.3.1. Strategy Training

Learners may know a range of learning strategies; however, they most often lack the required knowledge to use those strategies especially some deep strategies (e.g. Keyword Method; guessing, etc.) that require deeper processing. Strategy training seems to play a useful role in developing L2 vocabulary (Nation, 2001; O'Malley, 1987). However, "learner training remains a secondary concern in many second language classrooms" (Wenden, 1987c, p. 159). Hence, specific training should be provided by teachers.

EFL teachers should also encourage learners' independence from the teacher with learners' training that enables them not only to rely on subject material inside class, but also to pay enough attention to second language acquisition outside class. Cook (2001) states that poor students mostly respond to what they receive from their teachers i.e. depend on teachers and are less responsible for their learning. He adds that such poor students should be encouraged by teachers to be more independent in their learning through "learner training" that involves explaining learning strategies. Wenden (1987c, p. 166) summarizes the following guidelines for systematic training that teachers can follow:

(1) Inform students of the value and significance of the strategies you train them to use;

(2) Provide training in both cognitive and metacognitive strategies;

(3) To determine how to integrate learner training with language training, take into account the following factors: *range and specificity, autonomy of application, learners' needs*;

(4) In evaluating learner training it is important to consider the following: *learner attitudes, skill acquisition, task improvement, durability, transfer.*

For more information about learner training, see Wenden, 1987, pp. 159-167.

2.4. Research on VLS

As mentioned above, there are few studies investigating VLS as a whole. Schmitt's (1997) study on 600 Japanese EFL learners divided into four groups (Junior high school students, high school students, university students, and adult learners), used a questionnaire, which included 40 discovery and consolidation strategies, to survey what vocabulary learning strategies those students had been using. Students were asked to respond with 'Yes' or 'No' to indicate whether they used each strategy. They were also asked to rate the five most helpful strategies in both categories for them regardless of their use. This study revealed that the Japanese EFL learners were more attracted to (in descending order) using bilingual dictionary (85%), guessing from textual context (74%) and asking classmates for meaning (73%) in discovering meaning. For consolidating meaning, there was a strong preference for verbal and written repetition (76%), studying spelling (74%), saying the new word aloud (69%), taking notes in class (64%), studying the sound of the word (60%, and word lists (54%). On the other hand, Checking for L1 cognate was the most infrequently used discovering strategy (11%) by those students. For consolidating strategies, asking teachers to check flash cards for accuracy was the least used strategy (3%). Other infrequently used strategies included using semantic maps (9%), and using cognates in study (10%).

With respect to the five most helpful discovery strategies, students rated the bilingual dictionary as the most helpful one. The other strategies are (in descending order of occurrence) as follows: monolingual dictionary, asking teachers for paraphrasing or synonyms, guessing from textual context, analyzing pictures and gestures, and asking teachers for a sentence including the new word. For consolidating the word's meaning, written repetition was rated the most helpful strategy followed by verbal repetition. Other

helpful strategies included continuing to study word over time, learning idiom words together, saying the new word aloud when studying, connecting the word with synonyms/antonyms, studying the sound and the spelling of the word and finally taking notes in class. Some correlation can be remarked between the students reported strategy use and their ratings of the most helpful strategies.

Other large-scale studies undertaken on EFL learners' VLS include Ahmed (1989) and Gu and Johnson (1996). Ahmed's study used observation of learners while doing think aloud tasks and a structured interview to collect data from Sudanese students at different educational levels. It showed that good learners differ from underachieving learners in reported strategy use. Good learners used more strategies, were more aware of what they could learn about new words, paid more attention to collocation and spelling, and were more conscious of contextual learning. Underachieving learners, in contrast, used fewer learning strategies than the good learners and tended to avoid active practice. In addition, individual differences were identified among both groups of learners.

Gu and Johnson (1996) on their study on 850 Chinese university EFL students, used a questionnaire to examine learners' different VLS and related their reported strategy use to their general language proficiency and vocabulary size. They used learners' scores on a vocabulary size test for this purpose. Their analysis revealed that guessing from reading context, using dictionary, using note-taking and verbal repetition ranked the highest strategies used; using vocabulary lists ranked lowest. Also the strategies of contextual guessing, using dictionaries, note-taking, paying attention to word form, and activation of newly learned words had positive correlations with their students' vocabulary test scores. On the other hand, the strategies of memorization and visual repetition such as writing the

new word many times were negatively correlated with both students' vocabulary size and language proficiency. Moreover, the multiple regression analysis revealed that self initiation, a category included some metacognitive strategies, was found to be the best predictor of students' vocabulary size; visual repetition and imagery encoding appeared as negative predictors. This contradicts Steingart and Glock's (1979 cited in Schmitt, 1997) findings that imagery has proved to be more effective in learning.

An important addition to the literature was Sanaoui's (1995) study. In her series of longitudinal case studies on ESL and FSL (French as a second language) students in Canada, investigating VLS, she asked her subjects to keep a written record of what they did each day for a period of six, four and three weeks respectively. Sanaoui categorized her subjects into two main categories: learners who followed a structured approach in learning and those who followed an unstructured approach. The learners who followed a structured approach were able to take control of their learning. They kept notebooks and lists in order to organize records of their vocabulary learning. They regularly reviewed what they have done and kept their notebooks with them so that they could review them whenever time permitted. They intentionally sought out opportunities to practice what they had learned. The learners who followed an unstructured approach, in contrast, depended mainly on the course material. They tended to ignore their vocabulary lists or lost them, this is if they made lists at all. They did not pay enough planned attention to vocabulary outside class. The importance of utilizing metacognitive strategies in terms of planning for learning vocabulary through which learners could make improvement in their language learning is clearly shown.

Lawson and Hogben (1996) asked 15 Australian learners to think aloud while learning

twelve new words in Italian language to gather data about what learners could do as well as how well the strategies were applied; then they correlated strategy use with recall of the meaning, Their study demonstrated that repetition strategies were the most frequently used. It also revealed that elaboration strategies and deliberate mnemonic strategies although infrequently used by the learners were more effective for recall than repetition and word feature analysis strategies. Moreover, learners who used more strategies and used them more often recalled more words.

A more recent research by Moir and Nation (2002) has been concerned with the strategies learners use while learning vocabulary. They utilized an interview schedule which was designed primarily to elicit information about how ten adult ESL learners enrolled in an intensive L2 course behaved while learning vocabulary and their beliefs about vocabulary learning. This design was divided into three main parts:

(1) Vocabulary learning within the programme which concerns the students' personal approach to learning vocabulary within the context of the programme.

(2) Other vocabulary learning which concerns the students' vocabulary learning outside the course.

(3) Beliefs about vocabulary learning which concerns the students' personal beliefs about L2 learning vocabulary.

In addition, a short interview test was used to measure the depth of the students' knowledge of words studied during the programme three weeks before the test. The students were asked to provide as much information they know about each word as possible.

Moir and Nation discovered that only one student was very responsible for his learning

and aware of what learning vocabulary should require, whereas most students failed to "personalize the task in order to meet their individual learning needs" (p. 28); The reasons behind students' failure were: first, students were unaware of what learning vocabulary involves; second, they acted according to their teacher's expectations in terms of word selection, i.e. some of them focus on academic words although they were more interested in daily used words; third, the weekly tests had an impact on learning. The researchers (ibid, p. 30) suggested the following solutions:

(1) Learners need to have the attitude or willingness to take control of their own learning.

(2) They need to develop a reflective awareness of their own approaches to learning.

(3) They need to have the capability or skills to do the learning.

In general, the strategy studies show that using various strategies is valuable in language learning, particularly vocabulary learning. Many learners limit themselves to a few strategies for one reason or another. These learners might need strategy training which seems to play a useful role in developing L2 vocabulary (Nation, 2001). It is even more important for EFL learners where exposure to the learned language is less compared to ESL settings. It would not be enough for EFL learners to rely on the classroom materials and tasks as the main source of information. These learners should take control of their learning by being actively involved in the learning process if they wish to succeed in learning a language. A growing body of research (Ahmed, 1989; Sanaoui, 1995, Cook, 2001) illustrates that successful learners are those who are more organized and those who devote more time to their learning process. This most often is illustrated by the positive correlations between the learners' frequent and active use of VLS and their vocabulary knowledge. Cook (1986) suggests that "it must also not be forgotten that the relationship

between learner variables and L2 learning goes in both directions; learning a second language can affect the learner's makeup as well as vice versa" (p. 7).

As mentioned above, there is no particular attention given to vocabulary learning so far as teaching English at university level in Libya is concerned. Consequently, Libyan EFL learners might be unaware of a range of VLS, or misuse some effective VLS. This would make conducting the current study in such a context worthwhile. In conclusion and as suggested by researchers (e.g. Schmitt, 1997; Ahmed, 1989; Nation, 2001; O'Malley and Chamot, 1990), employing a range of VLS is helpful and very beneficial for learners in terms of vocabulary learning. Thus, the current study is mainly aiming to identify the VLS used by the Libyan EFL learners and how the range, the frequency and the effectiveness of VLS use are related to their vocabulary knowledge. Since some types of vocabulary tests are utilized in the current study to measure the Libyan EFL learners' vocabulary knowledge, it would be fruitful next to briefly provide background information about vocabulary knowledge testing as well as studies investigating vocabulary knowledge before finishing this chapter.

2.5. Background to Vocabulary Testing

According to Read (1997), there are many innovations in vocabulary testing that fit with two areas of interest: (1) estimating vocabulary size (also referred to as *breadth* of vocabulary knowledge) and (2) assessing quality of word knowledge (or *depth* of knowledge). Regarding EFL learners the aim of estimating vocabulary size is usually viewed in terms of their familiarity with a particular list of words, especially the high frequency words, for example, the General Service List (West, 1953). As aforementioned that vocabulary knowledge is not an all-or-nothing phenomenon (see Section, 2.3 in this

Chapter), so we need to be familiar with the aspects of vocabulary knowledge, i.e. what dimensions the concept of knowing a word has, if we want to develop tests that can to a certain extent assess learners' knowledge about vocabulary (Read, 1997). However, as far as the study in hand is concerned, tests of vocabulary proficiency, as we will see later, will be utilized to measure the Libyan majors' vocabulary size in terms of reception and production.

Meara and his colleagues (Meara and Buxton, 1987; Meara and Jones, 1988) developed a computerized checklist test for EFL learners. This test includes a mixture of non-words and real words obtained from different frequency levels of the Thorndike and Lorge (1944) list. This test initially seemed to be very capable of measuring learners' vocabulary knowledge; however, some problems have come up with checklist tests as outlined by Read (1997, p. 313):

- First, they do not work well with low-level learners, who respond unpredictably to the non-words.
- Secondly, they do not perform satisfactorily as measures of the English language ability of learners whose L1 is French, apparently because of the close relationship between the lexicons of the two languages.
- The third problem is that certain learners obtain very low scores as a result of their over willingness to claim knowledge of the non-words.

In addition, Cameron (2002) in a study measuring vocabulary size found that the non-words included in Meara's test made the results unreliable because the scoring system of this test counts any non-word that the examinee checks as known. Although it is easy to perform and has been proved to be valid (Meara and Buxton, 1987), problems usually come up with learners' reaction to non-words as mentioned above "and with speakers of

some languages, including Arabic" (Meara, personal communication cited in Cameron, 2002, p. 156). Another alternative that seems to be more appropriate for this study is the Vocabulary Levels Test (Nation 1983, 1990) (see section 2.5.2 below), one of the most used and renowned vocabulary tests, which is also based on different frequency word levels: 2000, 3000, 5000, 10000 frequency levels, and Academic words. Since the current study used two tests that are based on vocabulary frequency levels, we need first to know more information about vocabulary frequency levels before shedding light on those tests.

2.5.1. Vocabulary Frequency Levels

It would be useful for learners and teachers to perceive vocabulary as "consisting of a series of levels based on frequency of occurrence". These levels could contain some groups: the 1000 word group consisting of the most frequent 1000 words of the language, the next 1000 group consisting of the second most frequent 1000 words of the language and so on (Laufer and Nation, 1999, p. 35). For reasons such as the differences in relative frequency of using different words and the large size of English vocabulary, a distinction is made between the high-frequency words of the language, as represented by the most frequent 2000 words (Nation and Hwang, 1995) and the large number of the low-frequency words.

There is a consensus among some researchers (West, 1953; Nation, 1990) that the most suitable limit for high-frequency words is the 2000-word level. Knowledge of the most frequent words (2000 word level) arms learners with lexical knowledge that enables them to cope with every day communication. According to Nation (1990, 2001), one of the renowned and best lists of high-frequency words is *Michael West's General Service List* (GSL) (West, 1953) which includes 2000 word families. This list includes about 165

function words, for example, *a, some, because,* and *to*. The others are content words: nouns, verbs, adjectives and adverbs. Singleton (1999) defines content words as "those which are considered to have substantial meaning even out of context" and function words as "those considered to have little or no independent meaning and to have a largely grammatical role" (p. 11). In validating the GSL, Read (2000) claims that "one of the strengths of West's list is that it includes information about the relative frequency of different forms and meanings within a word family, a long with recommendations as to which meanings should be taught to learners just acquiring knowledge of the vocabulary for the first time" (p. 228). Within the 2000 word level words differ in terms of frequency; while the first 1,000 covers about 72% of the running words, the second 1,000 covers about 7% as shown in table 2.5.1 below.

Table 2.5.1: Frequency band and percentage of text coverage

Frequency level	Cumulative coverage (%)	Coverage (%)
1st 1000	72.0	72.0
2nd 1000	79.7	7.7
3rd 1000	84.0	4.3
4th 1000	86.8	2.8
5th 1000	88.7	1.9
6th 1000	89.9	1.2

Laufer and Nation (1999, p. 36)

EFL learners need to have knowledge of vocabulary, especially the high-frequency words (e.g. 2000 word level) in order to be able to express themselves in spoken and written discourse. Knowledge of about 3000 word families would make learners capable of reading authentic materials (Schmitt et al., 2001), i.e. materials written by native speakers for native speakers. It is also necessary for learners to have knowledge of the general academic words used in different academic disciplines in order to be academically

successful (Nation, 1993). He adds that in the beginning stages of L2 learning, all skills rely mainly on the learners' vocabulary size. As aforementioned, high frequency words are very important, so teachers and learners should make sure that these words are learned. Researchers and teachers have been using vocabulary tests that are based on frequency word levels to measure learners' vocabulary size in terms of reception as well as production. The following section provides some information about the three types of vocabulary tests used in the current study.

2.5.2. Vocabulary Levels Test

The Vocabulary Levels Test (VLT) is based on different frequency word levels: 2000, 3000, 5000, 10000 frequency levels, and Academic words. VLT was originally designed by Nation (1983, 1990) to be used by teachers for the purpose of measuring their learners' general and academic vocabulary size. According to Schmitt et al. (2001, p. 58),

> The frequency counts used were ones commonly available in Thorndike and Lorge (1944), Kučera and Francis (1967) and the General Service List (GSL) (West, 1953). Words were taken in a stratified sampling from the Thorndike and Lorge list, with reference to frequency data from Kučera and Francis and the GSL. The only exception to this is the 2000 section, where words from 1000 level and the 2000 level were sampled at 1:2 ratio. (The first thousand words of the GSL are usually those with frequency higher than 332 occurrences per 5 million words, plus months, days of the week, numbers, titles (Mr, Mrs, Miss, Ms, Mister), and frequent greeting (Hello, Hi, etc.). The words in the Academic section were sampled from the University Word List (Xue and Nation, 1984). (Because the University Word List was not yet available when Nation wrote the original Levels Test, the Academic section of the original test was sampled from Campion and Elley, 1971.)

The original VLT (Nation, 1983, 1990) employs matching 36 words with 18 definitions in groups of six and three respectively at each of the five levels as shown in the following example:

1. business
2. clock _____ part of a house
3. horse _____ animal with four legs
4. pencil _____ something used for writing
5. shoe
6. wall

Schmitt et al. (2001) have written two equivalent versions of VLT sampling 60 words and 30 definitions at each of the five frequency levels by combining the well performed clusters of the original versions (A-D). They reported two major differences between the original versions and the new ones (1 and 2): (1) at the frequency word level of 2000, the new versions adopt 28 words from the first 1000 word frequency level and 32 from the second 1000 word frequency level which makes the proportion approximately 1:1 compared to the 1:2 ratio of the older versions; (2) They wrote a new academic word list compiled by Coxhead (2000) which is used instead of the university word list (UWL) designed by Xue and Nation (1984) which was based on an outdated university list. Research has proven the reliability and validity of the word frequency levels (Read, 1988; Beglar and Hunt, 1999; Schmitt et al., 2001) with learners generally acquiring higher frequency words more than the lower frequency ones. Schmitt et al. (2001) used a criterion of mastery of 26 out of 30 (about 87%) at each of the word frequency levels which is close to Read's (1988) criterion of 16 out of 18 (about 89%). For more information, see Read, (1988) and Schmitt et al. (2001).

Since vocabulary knowledge has many dimensions as we have seen already, no single vocabulary test can measure all dimensions of vocabulary knowledge. Alongside VLT measuring receptive vocabulary size (breadth of knowledge) other tests concerning measuring depth of vocabulary knowledge and productive vocabulary size have been developed. Thus, the current study adopted other two types of vocabulary tests:

Vocabulary Size Test of Controlled Productive Ability (CPA) and Vocabulary Size Test of Free Productive Ability (FPA).

2.5.3. Vocabulary Size Test of Controlled Productive Ability

Laufer and Nation (1999) designed a test called Vocabulary Size Test of Controlled Productive Ability (CPA) which concerns the controlled productive level of vocabulary knowledge. The CPA is also based on the same VLT five levels mentioned above. The CPA samples 18 items at each of the word levels (see appendix 5B). A sentence context is provided and the missing target word has to be supplied. Because this test measures learners' vocabulary proficiency in terms of productive ability, it provides the minimal number of letters so that examinees would have no chance to supply any synonym word rather than the missing target word.

2.5.4. Vocabulary Size Test of Free Productive Ability

Vocabulary Size Test of Free Productive Ability (FPA), designed by the researcher for measuring the learners' productive knowledge. The foundation of this test goes back in the fifties and sixties after World War II when there was a heavy orientation towards research in language in many countries including France. This test was originated by *le Français fondamentale*, a linguistic research project, started in France in 1951. According to Stern (1983, p. 162), the principles on which this research was based include the following: (a) the main attention was paid to word frequency, especially relying on conversations to establish a frequency vocabulary of spoken French; (b) it also comprised research on "the new concept of *disponibilité'* or availability" which refers to analyzing the words which are accessible to the native speakers even though they are not in frequent use; these words were obtained by giving groups of school children a topic and asking

them to write the words they know about it. The findings of *le Français fondamentale* research project which were first published in 1954 consisted of 1475 entries. This test was utilized in the current study to measure learners' vocabulary proficiency in terms of production. For more information about these tests such as their validity and reliability, see Chapter 3, Section 3.4.3, page 79.

Having presented earlier the key studies in the area of VLS used by ESL/EFL learners, in the following paragraphs the focus will briefly be on studies investigating vocabulary knowledge in terms of reception and production as the most two renowned dimensions in vocabulary knowledge which this study aims to discover.

One of the important early vocabulary learning studies is Stoddard (1929) conducted on 328 school-age learners of French. It focused on comparing those learners' receptive and productive learning by being given a test of 50 French words and tested once receptively (see the French word, supply the English translation) and then productively (see the English word, supply the French translation). The main findings indicated that the scores for the receptive test were as twice as high as those for the productive test.

Waring's (1997), Laufer's (1998) and Laufer and Paribakht's (1998) findings agree with Stoddard's findings that receptive scores were higher than productive ones. In a more recent study conducted on the 10^{th} and 11^{th} graders concerning learners' receptive and productive vocabulary knowledge, Laufer (1998) found that there is an increase in the gap between receptive and productive vocabulary as learners progress in learning. She suggests that different dimensions (receptive, controlled productive and free productive) of vocabulary knowledge develop at different rates as learners progress in their language

learning. Laufer and Paribakht (1998) reconfirm these findings suggesting that the more receptive vocabulary the learner has, the wider the gap between receptive and productive vocabulary becomes. They suggest that this gap is due to less exposure and lack of practice which prevent the learners' receptive vocabulary knowledge from being activated and productively used. These studies also revealed positive correlations between the learners' passive vocabulary knowledge and their productive knowledge which means that the more learners are proficient in receptive vocabulary, the more they are proficient in productive vocabulary.

2.6. Conclusion

To conclude this chapter, Gu and Johnson's (1996) study and Schmitt's (1997) study are similar to the current study in that they were conducted at one point in time, and used a questionnaire to examine learners' VLS. However, the subjects were non-English majors, whereas this study is dealing with English majors. More importantly, this study utilized two additional research methods, namely semi-structured interviews to elicit in-depth details about how learners go about VLS as well as three vocabulary tests aiming to explore different dimensions of the Libyan EFL learners' vocabulary knowledge namely receptive, controlled productive, and free productive vocabulary knowledge. In addition, this study is carried out in a new context and, to my knowledge, it is the first study concentrating on the VLS of Libyan EFL learners. Thus, it would work as starting point for further studies undertaken in the Libyan context. All these would make a justification for conducting the current study which will hopefully provide meaningful, significant, and new information in the research area of vocabulary learning strategies and learning outcomes. The research design and the instruments used for data collection will be dealt with in the following chapter: the research methodology for this study.

CHAPTER THREE

Methodology

3.1. Introduction

This chapter presents the methodological issues underpinning this research. It first describes the research questions and their rationale. Then it explains the research design of this study where a description of the combination of the quantitative and qualitative research is provided. This is followed by outlining the data collection methods used in this study, to identify the Libyan EFL learners' vocabulary learning strategies (VLS) and their vocabulary knowledge, and then to investigate the use of these strategies in relation to the learners' vocabulary knowledge and motivation. After that, it presents the pilot studies conducted in both settings in the UK and Libya. Then, it introduces the main study which includes sampling and subjects, and proceeds to present the procedures for data collection and data analysis. Finally, it outlines the ethical issues to be taken into consideration.

3.2. Research Questions (RQ) and hypothesis

The research questions to be answered are drawn from the theoretical literature surveyed in chapter two, and the researcher's experience of being an EFL learner for 10 years (3 years at preparatory school, 3 years at secondary school, and 4 years at university level) and an EFL teacher for about 11 years (7 years at secondary schools and 4 years at university). The following are the central research questions (RQ) to be answered:

RQ1: What is the range and frequency of vocabulary learning strategies (VLS) used by the Libyan university English majors?

The hypothesis for RQ1 is that, while learners may use a wide range of vocabulary learning strategies (VLS), these learners may not use other VLS which they do not know. This could be attributed to the fact that learners have not been taught VLS; that they have no training on how to use various VLS. As a result, they would miss the opportunity to make use of many VLS which are essential to develop their vocabulary learning. So the first question aims to identify the range and the frequency of use of VLS the learners use to learn vocabulary through a questionnaire seeking information about the learners' VLS.

RQ2: How do the Libyan university English majors view their vocabulary learning and how does this affect their vocabulary knowledge?

RQ2 explores how learners approach vocabulary learning in order to improve their vocabulary knowledge. Having found the range and frequency of use of VLS, the question that might be raised is how effective learners are in using these reported strategies. Even if learners use a range of VLS, they might not use them effectively. Thus, RQ2 explores in detail how the EFL learners view their vocabulary learning in general, and particularly how they use VLS by interviewing a sub-sample of the subjects.

RQ3: What is the Libyan university English majors' vocabulary knowledge in terms of reception, controlled production and free production and how do these relate to one another?

RQ3 aims to measure the learners' receptive and controlled productive vocabulary knowledge at different word frequency levels: the 2,000, 3,000, 5,000 word levels, and the academic vocabulary, using the Nation levels test as described earlier in Chapter 2,

Sections 2.5.2 and 2.5.3. Then it measures the learners' vocabulary knowledge in less controlled situations where learners are given opportunities to supply whatever words they know related to specific topics (see Section 2.5.4). RQ3 hypothesizes that the Libyan EFL learners lack the knowledge about even the high word frequency levels.

The second part of RQ3 explores the relationship between the learners' receptive vocabulary knowledge and their controlled and free productive ability by correlating learners' scores on the three vocabulary measures, namely the Vocabulary Levels Test (VLT), the Vocabulary Size Test of Controlled Productive Ability (CPA) and the Vocabulary Size Test of Free Productive Ability (FPA).

RQ4: Is there a correlation between the Libyan university English majors' vocabulary knowledge and their use of vocabulary learning strategies (VLS)?

The hypothesis for RQ4 is that the differences among learners in both quantity and quality of use of VLS correlate with their vocabulary knowledge. The evidence to test this hypothesis will come from the correlation of the VLS data in RQ1 and RQ2 with the tests of vocabulary in RQ3.

RQ5: Is there a relationship between the Libyan university English majors' motivation to learn English, their use of vocabulary learning strategies (VLS) and their vocabulary knowledge?

The aim of RQ5 is first to measure the learners' motivation to learn English and then to relate it to their VLS and their vocabulary knowledge. Motivation will be measured by a motivation test battery, adapted from Gardner's (1985) integrative and instrumental section of the Attitude/Motivation Test Battery. The hypothesis for RQ5 is based on the

findings of research that the highly motivated learners use more VLS and are more successful in language learning.

3.3. Research Design

It is very important for researchers to identify the research design of their studies, as the research design will have implications on both data collection procedures and data analysis. Researchers should know which approach is more appropriate for their research, and maintain either quantitative or qualitative research, or both of them, in order to achieve the best results. In this section, I will first, briefly describe the two approaches separately and then outline the combination of these two approaches in carrying out one study.

Quantitative research emphasizes measurements, testing of hypotheses based on observations, and statistical analysis of data. Qualitative research, on the other hand, emphasizes detailed descriptions of social practices to understand how the participants experience and explain their own world. The data collection instruments associated with qualitative research include participant observation, in-depth interviews, or an in-depth analysis of a single case (Jackson, 1995). Larsen-Freeman and Long (1991) state that in the field of second language acquisition (SLA), there is a distinction between researchers who prefer the quantitative research strategies and those who prefer the qualitative research strategies. In defining these two research approaches, they write:

> The prototypical qualitative methodology is an ethnographic study in which the researchers do not set out to test hypothesis but rather to observe what is present with their focus, and consequently the data, free to vary during the course of the observation. A quantitative study, on the other hand, is best typified by an experiment designed to test a hypothesis through the use of objective instruments and appropriate statistical analysis (p. 11).

As we see each research instrument fits one of the two approaches better than the other. However, this does not mean that researchers cannot use research methods associated with both approaches. Larsen-Freeman and Long (1991) stated that there is no reason hampering the utilization of both research approaches as one supplementing the other in a single study. Moreover, there is a general consensus among SLA researchers that quantitative and qualitative studies are in fact complementary ways of discovering new knowledge (e.g. Seliger and Shohamy, 1989; Larsen-Freeman and Long, 1991; Cohen and Olshtain, 1994; Markee, 1994; Douglas and Selinker, 1994). Although there are some differences between qualitative research and quantitative research approaches in terms of their epistemological and ontological commitments, in fact, there is no sharp line distinguishing the two approaches. In other words, practically, there is always overlap between them and they are often employed together within a single piece of research. For example, researchers can quantify qualitative data. This certainly encourages adopting the both main types of strategy to be utilized in a single study.

Trying to simplify the categories of research designs, Seliger and Shohamy (1989), distinguished between three types of research design: *Qualitative, descriptive,* and *experimental* (quantitative). Because these three designs share some features, Seliger and Shohamy viewed them as a continuum rather than representatives of "incomparable philosophies about how to study SLA" (p. 116). Figure 3.3 below shows the types of research designs with where each of them would fit into the research parameters:

Figure 3.3: Types of designs and the research parameters

	Qualitative	**Descriptive**	**Experimental**
1. Synthetic/ holistic	←	→	Analytic/ constituent
2. Heuristic	←	→	Deductive
3. Control/low	←	→	Control/high

Seliger and Shohamy (1989, p. 116)

In this section the focus is mainly on the descriptive design since the current study is primarily a descriptive study. In defining the descriptive research, Seliger and Shohamy (1989) write:

> Descriptive research as a type of category of research refers to investigation which utilizes already existing data or non-experimental research with a preconceived hypothesis. A descriptive study might describe an aspect of SLA from a more synthetic perspective or might focus on the description of a specific constituent of the process, such as on the acquisition of a particular language structure or on one particular language learning behaviour to the exclusion of others. That is, in a descriptive study the researchers begin with general questions in mind about the phenomenon they are studying or with more specific questions and with a specific focus. (p. 117).

Descriptive research seems similar to the qualitative research in that both focus on providing description about a phenomenon. Nevertheless, they are different in that qualitative research is "heuristic and not deductive since few, if any, decisions regarding research questions or data are made before the research begins" (ibid, p. 116), while descriptive research "is often deductive rather than heuristic, and begins with preconceived hypothesis and a narrower scope of investigation" (p. 124). Descriptive research also shares some features with the experimental research in that both can be "hypothesis-driven, in that the researcher starts out with a theory or a specific research question" (p. 118). However, there are major differences between the descriptive research and the experimental research. The main differences are explained below by Seliger and Shohamy (1989) as follows:

> Descriptive research can be either synthetic or analytic in its approach to the second language phenomenon being studied, while experimental research must be analytic. In addition, descriptive research may be conducted for heuristic reasons, for example, to find out more about a particular second language phenomenon, or to attempt to test a priori hypothesis...In descriptive research, no manipulation of naturally occurring phenomenon occurs, while in experimental research, manipulation and control become important measures of both internal and external validity (p. 118).

The design of the current study is basically descriptive research which is schematically placed in the middle of the continuum between the qualitative and the experimental research designs. The data collection instruments associated with descriptive research, according to Seliger and Shohamy (1989), include tests, surveys and questionnaires, self-report and interviews, and observations. Apart from observation, all the other research methods associated with the descriptive research design were utilized in the current study, to identify, investigate, and interpret quantitatively and qualitatively the findings concerning the VLS used by the Libyan EFL learners and how they relate to their vocabulary knowledge. Most of the methods adopted for data collection in this study fit more the quantitative and descriptive research paradigms, namely a vocabulary learning strategies questionnaire, a motivation test, and vocabulary tests: VLT, CPA, and FPA. However, interviewing as one of the key elements in descriptive and qualitative research was also adopted in terms of data collection instruments, namely semi-structured interviews. Researchers have been using a number of these data collection instruments to investigate the VLS used by EFL/ESL learners. For example, Ahmed (1989) used observation of learners doing think aloud tasks and a structured interview; Gu and Johnson (1996) used a questionnaire and a vocabulary test; Schmitt (1997) used a questionnaire.

As far as vocabulary learning strategies used by learners are concerned, Nation (2001, p.224) listed the following four ways of data collection through which studies of strategy use can observe learners:

1. *Studies can gather information about what learners say they usually do.* The instruments for gathering such information usually include written questionnaires or oral interviews. For the sake of collecting as much data as possible, this instrument is favoured

over other data collection instruments because it is easy to administer to large groups of people without being too time-consuming. The limitation of these instruments is that "the data gathered is [sic] retrospective and may be not a true reflection of what actually happens when a learner tackles a word" (Nation, 2001, p.224).

2. *Studies can gather information about what learners are able to do.* The instruments for gathering such information usually include getting learners to speak aloud while performing some learning tasks, and observing them closely while they perform the task. The learners know that they are being observed, and may be informed about what the researcher is examining. The disadvantages of such instruments are that "data gathering is time-consuming, and observation can influence the learners' performance, encouraging them to do things they do not normally do" (p.224).

3. *Studies can gather information about what learners say they did.* The instruments for gathering such information usually involve asking learners to describe what they did after getting them to perform a task. Gathering such data is time consuming. Again the criticism is that respondents' answers might not reflect their actual behaviour because they are not adequately aware of it.

4. *Studies can gather information about what learners actually do.* Gathering such information involves learners' unawareness of being observed or unawareness of the goal of the observation. The problem with such data collecting is that it can only identify "external signs of what is happening, and thus may require high degrees of interpretation by the observer" (p.224).

Nation claims that "these four ways of data gathering differ in reliability, validity and practicality, with the more practical and reliable ways tending to be less valid in gaining information about normal behaviour" (p.224). For the sake of gathering data from as

many subjects as possible and taking into consideration the time restrictions, in the current study the first way of data collection (*Studies can gather information about what learners say they usually do*) was adopted in terms of utilizing a vocabulary learning strategies questionnaire (VLSQ) and semi-structured interviews, see section 7.3, page 232 for limitations of these instruments. In their investigation of learning strategies, O'Malley et al. (1985) found out that interviewing learners enabled them to identify learning strategies more successfully than using other research methods such as observations or/and interviewing learners' teachers. In addition, other research methods that include three vocabulary tests (VLT, CPA, and FPA) and a motivation test were used in the current study to measure other relevant variables.

3.4. Data Collection Instruments

This section outlines the data collection instruments used in the current study. The data collection used three main cycles of data collection procedures. It included (1) a vocabulary learning strategies questionnaire and a motivation test, (2) vocabulary tests, and (3) interviews. An explanation of each instrument is presented below.

3.4.1. Questionnaires

According to Brown (2001), questionnaires refer to "any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting them among existing answers" (p.6). "Questionnaires allow researchers to gather information that learners are able to report about themselves, such as their beliefs and motivation about learning or their reactions to learning and classroom instructions and activities—information that is typically not

available from production data alone" (Mackey and Gass, 2005, pp. 92-93). Questionnaires are the most used data collection instrument in statistical work (Dornyei, 2003). Dornyei claims that questionnaires are used to elicit three types of data about the respondents: "*factual, behavioural,* and *attitudinal*". He writes:

> (1) *Factual questions* are used to find out about who the respondents are; they typically cover demographic characteristics (e.g. age, gender, and race)... (2) *Behavioural questions* are used to find out what the respondents are doing or have done in the past; they ask about people's actions, life-styles, habits, and personal history...(3) *Attitudinal questions* are used to find out what people think; this is a broad category that concerns *attitudes, opinions, beliefs, interests, and values* (p.8).

As a well-known method of data collection, questionnaires are usually used to support findings with quantitative results [i.e. category (2) above]. In the current study a vocabulary learning strategies questionnaire (VLSQ) was developed with the aim of seeking answers from participants to factual and behavioural questions.

In order to achieve the best results from questionnaires, researchers, according to Mackey and Gass (2005, p. 96) should take the following points into consideration:

- Simple, uncluttered formats.
- Unambiguous, answerable questions.
- Review by several researchers.
- Piloting among a representative sample of the research population.

To avoid any problems that might be encountered in the main study, the researcher took into account the above mentioned points. In this respect, the questionnaire items were frequently revised by the researcher, the supervisor, and some PhD student colleagues. In addition, two pilot studies were conducted in UK and Libya (for more details see pilot study in this Chapter, Section 3.5).

Some problems may come up with using questionnaires as an instrument of data collection. One of the problems concerns the difficulty of understanding questionnaire items when it is completed in the L2. The solution for this problem, as far as the study in hand is concerned, is to complete the questionnaire in the subjects' L1. Another problem is that questionnaires may not give detailed information to make the picture clear. This anticipated problem would be solved by interviewing a sub-sample of the subjects with the aim of eliciting more information about the learners' VLS. Hence, the semi-structured interviews were employed as a supplement of the VLSQ (see semi-structured interviews in this Chapter, Section 3.4.4).

3.4.1.1. Vocabulary Learning Strategies Questionnaire (VLSQ)

This questionnaire was chosen to measure the range and the frequency of vocabulary learning strategies (VLS) EFL learners use. It consists of three parts. In part one, participants were asked to answer factual questions (e.g. age, gender and educational background) in order to obtain background information about the participants. In part two, participants were asked to answer behavioural questions. It consists of 44 items related to VLS (see appendix 3A). In part three, participants were asked two additional questions: first, they were asked to respectively rate the ten most helpful strategies for them; second, they were allowed to add any other strategies not covered in this questionnaire.

The VLSQ items have been developed in some studies (e.g. Schmitt, 1997) and proved to be effective in obtaining data about learners' VLS. Many items were modified, some were added, few were omitted, while others were expanded and subdivided to be more comprehensible and applicable to the Libyan setting. The items seek information about five categories of VLS:

1. *determination strategies (*items 1, 6, 13, 22, 23, 36, 37, 42, 43);
2. *social strategies* (items 2, 10, 15, 21, 27, 32, 38);
3. *memory strategies* (items 3, 7, 8, 11, 16, 17, 18, 28, 30, 31, 33, 40, 41, 44)
4. *cognitive strategies* (items 4, 12, 20, 26, 35);
5. *metacognitive strategies* (items 5, 9, 14, 19, 24, 25, 29, 34, 39).

(See Chapter 2, Section 2.2.1.3, for definition of each category).

The VLSQ's chosen format was formulated as Likert scales. Seeking responses about students' VLS, students were asked to select one of the six choices (*Never, Seldom, Occasionally, Often, Usually,* and *Always*) by ticking the box matching their choice as in the following example:

I repeat the word over and over.

Never 0%	Seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%
			×		

These words mean: *never (0%); seldom* (rarely, *20%); occasionally* (40%); *often* (60%); *usually* (80%) and *always* (100%) as described in front page of the VLSQ (see appendix 3A). A 6-point Likert scale was used in the VLSQ in order to make sure that this scale can capture all learners' responses.

The items of the VLSQ were worded to elicit answers regarding students' VLS. Since the subjects were EFL learners, careful use of language was considered and the wording of the VLSQ passed through many phases to reach this final form. First, in order to ensure response validity, this VLSQ was revised and reworded many times by the researcher and the supervisor; thinking of conducting the questionnaire in English, the items were worded as simply as possible in order to be more comprehensible. Second, Arabic

translations for all items as well as some explanations for the items hard to understand were provided to make sure that students understand every item. Third, to avoid any confusion that might occur when using both languages (English and Arabic), the researcher eventually decided to conduct the questionnaire in Arabic, the language more comprehensible for subjects. The researcher prepared two versions of English and Arabic (see appendixes 3A and 3B) and invited 5 Arab PhD student colleagues in the University of Newcastle) to check the agreement of the meanings of items presented in both versions, especially the Arabic version. Finally the VLSQ was piloted twice, in the UK and in Libya, before being administered for the main study as Skehan (1991) recommends that scales should be piloted and tried before being used in actual research studies. Moreover, an internal reliability analysis was conducted on the items of the VLSQ for the total sample. The Cronbach alpha coefficient was 0.88, see table 3.4.1.1 below.

Table 3.4.1.1: Reliability of the scale of the VLSQ

Variable	No. of items	Cronbach alpha coefficient
VLSQ	**44**	**.883**

3.4.2. Motivation Test

In this test, participants were asked to answer attitudinal questions. It was developed with the aim of obtaining information from students about their motivation to learn English. This might help explain why the Libyan EFL learners use certain VLS. It is just a quick motivation test consisting of eight items (see appendix 4A), and adopted from Gardner's (1985) integrative and instrumental section of the Attitude/Motivation Test Battery; odd-numbered items are integrative motivation, even-numbered instrumental. A growing body of research has supported the reliability and validity of this test which has been used in many studies of L2 motivation in several settings (e.g. Gardner et al, 1985; Gardner and

Lysynchuk, 1990; Gardner and MacIntyre, 1993; Clement et al., 1994; Cook, 2001). This test was chosen because it is easy to conduct and the information sought is straightforward through simply worded items.

Like the vocabulary learning strategies questionnaire (VLSQ), the motivation test's chosen format was formulated according to Likert scale items, and subjects were asked to select one of seven choices: *Strongly Disagree, Moderately Disagree, Slightly Disagree, Neutral, Slightly Agree, Moderately Agree,* and *Strongly Agree.* These choices were given numbers from 1 to 7, and subjects were asked to circle the number of their choice as in the following example:

Studying English is important to me because it will make me more knowledgeable.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

The researcher thought of standardizing the number of the choices for both the VLSQ and the motivation test, but as can be seen unlike the six point scale for the VLSQ, the scale format for the motivation test has seven points. The difference in the number of choices is because the motivation test includes a neutral choice (given number 4) which is irrelevant to the VLSQ.

Seeking answers regarding EFL learners' motivation to learn English, the motivation test items were originally written in English, translated into Arabic, revised by the researcher and the 5 Arab PhD student colleagues mentioned above, and piloted twice in the UK and Libya in order to avoid any obstacles that might hamper understanding and clarity in the main study. The test was conducted in Arabic (see appendix 4B) to avoid any ambiguity and/or misunderstanding.

3.4.3. Vocabulary Tests

There is usually consensus among learners, teachers and researchers that vocabulary is an essential part of L2 proficiency. A growing body of research supports the notion of paying enough attention to vocabulary knowledge and VLS if learners wish to gain success in L2 learning (e.g. Krashen, 1982; Singleton, 1999; Hedge, 2000; Nation, 2001). There are many degrees of vocabulary knowledge and the distinction between receptive and productive knowledge is the most renowned of them (for more information about vocabulary knowledge see Chapter two, Section 2.3). "In order to gain a rounded picture of a learner's vocabulary knowledge, it is necessary to have a range of vocabulary measures to draw on" (Nation, 2001). Thus, three vocabulary knowledge measures were used in the current study as follows:

3.4.3.1. The Vocabulary Levels Test (VLT)

One well-known vocabulary size measure is the Vocabulary Levels Test (VLT) which was designed by Nation (1983, 1990). It was originally designed to be used by teachers for the purpose of measuring their learners' general and academic vocabulary size. It is a multiple-choice vocabulary test which has been widely used by researchers to measure the EFL/ESL learners' vocabulary size receptively at four word frequency levels: the 2000 word level, 3000 word level, 5000 word level, 10,000 word level; it also measures the learners' academic vocabulary also called University Word List (henceforth UWL) (For information about the distinction of word frequency levels see Chapter two, Section 2.5.1, page 58). In other words, the VLT measures recognition and comprehension of words or what can be called receptive vocabulary knowledge. The underlying principle for the test came from research that has proved the positive correlation between learners' vocabulary size and the ability to use English in different ways (Schmitt et al., 2001). The VLT

"proved to be highly reliable and to correlate very well with tests of reading comprehension as well as psychometric measures of intelligence" (Read, 1997, p. 304). It has also been validated and widely used in vocabulary research studies by researchers (Read, 1988; Schmitt and Meara, 1997; Laufer and Paribakht, 1998; Beglar and Hunt, 1999; Schmitt et al., 2001).

Schmitt et al. (2001) have written two equivalent versions of the VLT: version 1 which was utilized in this study and version 2. Unlike the original test designed by Nation (1983) which samples 36 words and 18 definitions at each word level, for more vocabulary to be tested Schmitt et al. versions sample 60 words and 30 definitions categorized in groups of six and three respectively at each word level (see appendix 5A). The maximum score is 30 for each level, and the grading is in terms of correct/ incorrect for each item. Excluding the 10000 word level, this test was adopted in total by the researcher.

3.4.3.2. The Vocabulary Size Test of Controlled Productive Ability (CPA)

The CPA is used to test the ability to use a word when asked to do so by a teacher or researcher (performance-based). The overall structure of the CPA test is modelled on the Vocabulary Levels Test (VLT) that was originally made by Paul Nation (1983, 1990) and utilizing the same four word frequency levels and University Word List (UWL). The CPA is "reliable, valid (in that the levels distinguished between different proficiency groups) and practical" (Laufer and Nation, 1999, p. 33).

The CPA samples 18 items at each of the four frequency word levels (2000 word level, 3000 word level, 5000 word level, 10,000 word level) and University Word List (UWL) (see appendix 5B). The grading for the CPA test is in terms of correct/incorrect for each

item and the maximum score is 18 for each level. Minor spelling mistakes and grammatical mistakes are not marked as incorrect. Again excluding the 10000 word level, this test was adopted in total by the researcher.

3.4.3.3. The Vocabulary Size Test of Free Productive Ability (FPA)

The purpose of first establishing this test was to identify the readily accessible words to native speakers; however, in this study it will be used to explore EFL learners' vocabulary knowledge in less controlled situations, and that is why I call it Vocabulary Size Test of Free Productive Ability (FPA). Subjects taking FPA are required to write down as much words they know as possible about a particular topic in about five minutes. In the case of this study students would be required to write about two topics namely (1) parts of the body (2) learning and teaching English (see appendix 5C). There is no required number of words learners have to supply. The grading for the FPA is in terms of correct/ incorrect for each item (Appropriateness and spelling). Each subject has three scores: a score for the number of correct items for each of the two topics, and for the total score of correctly written items. Minor spelling mistakes are not marked as incorrect.

Having been piloted, the FPA test has been proved to be valid and reliable in measuring the EFL learners' productive vocabulary since it significantly correlated with the VLT and CPA tests in the pilot study conducted in Libya as well as the main study as will be shown later in Chapter five, Section 5.5. VLT and CPA have been taken from published sources, as described above, which have tested their reliability and validity.

3.4.4. Semi-structured Interviews

Shohamy (1994) stresses that language testers should use other assessment instruments, as referred to by her "those that are less test-like and more ethnographic" (p.136), in order to afford more substantial contributions to SLA theory and research by supplying more detailed information about learners' L2 knowledge. Hence, the semi-structured interviews as another research method utilized in the current study is outlined.

Interviewing has been widely used as a source of data collection in applied linguistics (Nunan, 1992). Cohen et al. (2000) claims that the research interview may serve three objectives. First, it may be used as the main method of data collection; second, it may be used for examining hypotheses or suggesting new ones or as a tool to help identify factors and relationships. And third, it may be used accompanying other research methods. In this case, interviews are used to follow up unanticipated outcomes, or as a supplement to other methods for making them more valid, or to find out what reasons make respondents respond the way they do and this can be through getting deeper into respondents' motivation (Kerlinger, 1970).

Quite a lot of research has proved utilizing a range of VLS in language learning; yet, in learning strategies it is more a matter of quality than quantity of strategies that leads to success in language learning (Dornyei, 2003). In other words, learners can be more successful in learning a language by using a few strategies effectively than those using a range of strategies ineffectively. Although the type and frequency of strategy use could be identified by using the vocabulary learning strategies questionnaire (VLSQ) in this study, interviews were employed to serve the third objective mentioned above, that is, as a main supplement of the VLSQ. King (1994) suggests guidelines for the circumstances in which

a qualitative research interviews could be most appropriate, one of which is "where a quantitative study has been carried out, and qualitative data are required to validate particular measures or to clarify and illustrate the meaning of the findings" (p17). In this case, it is used to follow up results or to validate other research methods utilized in the current study, namely the VLSQ and the vocabulary tests.

In this study, the semi-structured interviews, commonly used in connection with qualitative research (Bryman, 2001), were used in that a specific list of questions were predetermined by the researcher, but had no fixed order, i.e. the order could be changed depending on the interviewer's perception of what works best. The interviewer can omit, modify and add questions if they seem inappropriate with interviewees. According to Bryman, 2001, p. 110)

> Semi-structured interview refers to "a context in which the interviewer has a series of questions that are in the general form of an interview schedule but is able to vary the sequence of questions. The interviewer usually has some latitude to ask further questions in response to what are seen as significant replies".

Due to religious and cultural constraints (e.g. gender; privacy), in this study group interviews was the type preferred for both the researcher and the students over individual interviews (see section 3.7.5 later for more information). Unlike the commonly used individual interviews, group interviews entail interviewing people as a group. Group interviews are like focus groups which can be based around a stimulus, for example a completed a questionnaire (Mackey and Gass, 2005) as is the case of the current study, although researchers (e.g. Bryman, 2004, p. 346) suggest some distinctions:

- Focus groups typically emphasize s specific theme or topic, whereas group interviews often span very widely;

- Group interviews are sometimes conducted so that the researcher can save time and money by interviewing a number of individuals simultaneously; however, focus interviews are not carries out for this reason;
- The interviewer in focused group is more interested in the ways individuals discuss an issue as members of group rather than as individuals.

Bryman adds that the distinction between the focus group and group interviews is not so clear cut that both terms can be used interchangeably.

Group interviews have some benefits such as those of focus group. Group interviews allow the interviewees to probe each other's view point. This will enable the interviewer to elicit more information than that of individual interviews. Since an interviewee in group interviews listen to other interviewees' answers, he or she would have opportunities to discuss, agree with or contradict other interviewees' opinions. This would eventually help the interviewer get more in depth details about how interviewees think about a certain issue. In addition, interviewees in group interviews will argue with or challenge each other's points of view; this would enable the researcher to get more explanations of what the interviewees think because they were given more chances to think about their view points (ibid). Lewis (1992) found that group interviews can raise interviewees' (10-year-olds in his study) awareness of learning difficulties. Moreover, by conducting group interviews, we can obtain a wider range of responses compared to individual interviews (ibid).

15 subjects were randomly selected out of 112 respondents (more precisely out of 56: 'group A' respondents) according to their scores in the vocabulary knowledge tests and were divided into three groups of five (see table 3.4.4 below): the high vocabulary

knowledge group (HVK) represents the 5 students with the highest scores, the moderate vocabulary knowledge group (MVK) represents the 5 students with moderate scores, and the low vocabulary knowledge group (LVK) represents the 5 students with the lowest scores. The interviews were conducted as a group with the aims of: first, eliciting information about learners' perceptions of VLS use and whether they have received any strategy training (part one); these were as introducing questions to part two. Second and most importantly, probing in detail how these learners use VLS on the basis that interviews would help interpret learners' responses to the VLSQ (part two) and their scores in the VLT, CPA and FPA tests. Since rote strategies such as repetition and taking notes of vocabulary are easy to be used by learners, the questions of the interviews were mainly focused on the VLS that seemed to be complex and difficult to use. The interviews were worded in English (see appendix 6), and conducted in English and Arabic; i.e. Arabic translation for each item was provided by the researcher and subjects had the choice to respond to the interview questions using Arabic, English or both; they were tape-recorded and transcribed.

Table 3.4.4: Group interviews participants

	HVK group	MVK group	LVK group	Sum
Male	0	1	0	1
Female	5	4	5	14
Total	5	5	5	15

3.5. Pilot Study

Any instrument for data collection should be tried in a pilot study, if researchers wish to anticipate any difficulties that might be encountered in the main study. Seliger and Shohamy (1989) believe that "data collection procedures should be tried out in the pilot

phase of the study" (p. 184). The pilot study in hand was carried out in two stages: first, it was conducted in the UK with five male Libyan postgraduate students joining two ESL programmes in the city of Newcastle upon Tyne, namely the International House and the Northumbria University ESL programmes; then it took place in Libya with nine 4th year Libyan university students (7 females and 2 males) majoring in English language at another university called the University of Aljabel Algharbi.

3.5.1. Pilot Study in the UK

This pilot study concerned piloting the Vocabulary Learning Strategies Questionnaire (VLSQ) and the Motivation Test, as well as the vocabulary tests: the Vocabulary Levels Test (VLT) and the Vocabulary Size Test of Controlled Productive Ability (CPA). It excluded piloting the Vocabulary Size Test of Controlled Productive Ability (FPA) and the interviews because it was thought that this sample was not a representative sample of the research population, namely the EFL learners learning English in Libya.

- **Administering the VLSQ and the Motivation Test**

The VLSQ and the motivation test were administered with the aim of finding out how feasible and comprehensible the items were to the subjects, so any incomprehensible items could be either modified or excluded. It took place on the 15th of October, 2005. The five Libyan subjects represented different majors: two accountants, one chemist, one engineer, and one physician. When the study was conducted, subjects had been in the UK for a short period of time ranging from 4 to 6 months and were taking ESL courses. Some of them came to do masters degree while others were taking some training courses related to their careers in Libya.

Prior to piloting these methods of data collection, all items had been revised at least two or three times with five of my Arab PhD student colleagues at the University of Newcastle upon Tyne. This helped to make items as comprehensible to subjects as possible; it also explains why hardly any questions were raised by subjects concerning any ambiguity of the items. Only one item which seemed to be ambiguous to one of the subjects was reworded. It took the learners about 5 to 7 minutes to complete the motivation test, and took them 30 to 40 minutes to complete the VLSQ.

- **Administering the Vocabulary Tests**

This pilot study was conducted to measure the time needed to complete the two main vocabulary tests (VLT and CPA). Subjects were asked to take the VLT test and the CPA test at each level of the four frequency word levels (2000, 3000, 5000, and 10,000 word levels) and the University Word List (UWL). Even though the participants represented different proficiency levels as some of them like the chemist and the physician had been taught in English in their undergraduate studies, but again the objective was to explore the time needed to complete each test. First, the subjects were given the CPA test which they finished in 35 minutes; then they took the VLT test and managed to finish in 40 minutes time. The 10,000 word level was too difficult for them and hardly any answers were given at this level.

3.5.2. Pilot Study in Libya

This pilot study was conducted with nine English majors at another university in Libya. It took place in the faculty of Arts, the University of Aljabel Algharbi on the 23rd of January, 2006. It respectively comprised the following three stages: (1) administering the

Vocabulary Learning Strategies Questionnaire (VLSQ) and the Motivation Test, (2) conducting the vocabulary tests and (3) piloting the interviews.

- **Administering the VLSQ and the Motivation Test**

The VLSQ and the Motivation Test were conducted with the aim of finding out any ambiguity in the wording of the items and anticipating any difficulties that could hamper understanding in the main study. First, subjects were given the VLSQ; they faced no difficulties understanding the questionnaire items and it took them about 25 to 35 minutes to finish. Then, they took the motivation test which they completed in about five minutes.

- **Administering the Vocabulary Tests**

-The CPA test and the VLT test

This pilot study was conducted to serve three main objectives: (1) to measure the time needed to finish these tests; (2) to see whether subjects could give answers at each of the four word frequency levels and the UWL in the CPA test and the VLT test, and (3) to anticipate any difficulties that might be encountered in the main study. Since the sample for this study was a representative sample of the research population, this study was promising and revealed the following results. Regarding the time needed to finish the tests, it took students about 45 to 55 minutes to complete the CPA test and about 45 to 65 minutes to complete the VLT test. Regarding students' performance in these two tests, only a few students could give some correct answers to the 5000 word level and no answers were given to the 10000 word level, so it was decided to exclude the 10000 word range for the main study. In this respect Laufer and Goldstein (2004) confirmed that "if learners do not do well in a low level vocabulary, there is no point in presenting them with too many more difficult items" (p. 412).

-The FPA test

The researcher took into consideration the subjects' familiarity with topics to make sure that this is not a factor that may influence their performance. After thinking carefully of some topics that mostly suit the subjects' culture and knowledge, three topics were selected and subjects were asked to select two of them to write about. The three topics were: (1) Parts of the body, (2) Sports, and (3) Learning and teaching English. All the students chose topics number (1) and (3); excluding the topic of sports by the students could be attributed to the fact that they could be unfamiliar with sports terms, especially females in Libya who are usually uninterested in sports. So it was decided to select the topics of Parts of the body and Learning and teaching English for the main study. It took the participants about ten minutes to complete the FPA test. The VLSQ, the motivation test, and the vocabulary tests were all conducted in one day.

- **Piloting the Interview Guide**

The interviews were piloted on another day because, first the method demands plenty of time; second and most importantly, most of the interview questions were based on the participants responses to the VLSQ; finally, the participants would be distributed in groups of three based on their vocabulary knowledge scores. Having finished piloting the VLSQ, the motivation test and the vocabulary tests, the researcher made arrangements with the subjects for the third phase of the pilot study: piloting the interviews. The researcher explained to the subjects that the interviews would be about vocabulary learning; that subjects would be interviewed as a group, the type of interviews they, especially females, felt more comfortable with for religious and cultural reasons; that interviews would be conducted in Arabic and recorded.

No specific time was arranged for the interviews because this was dependent on correcting the subjects' papers in both the pilot study as well as the main study. Moreover, the researcher intentionally delayed piloting the interviews to be closer to the time of the interviews in the main study. By doing so, it would be easier for the researcher to remember any drawbacks in the pilot interview that can be avoided in the interviews for the main study. Based on their vocabulary knowledge scores, the subjects were divided into three groups of three: (1) the learners with higher vocabulary knowledge (HVK), (2) the learners with moderate vocabulary knowledge (MVK), and the learners with lower vocabulary knowledge (LVK). However, due to time restrictions, it was thought that interviewing two groups would be quite enough for piloting the interviews. Thus, the two groups of HVK (3 females) and LVK (2 females and 1 male) learners were interviewed with the following aims in mind:

- To measure the time needed.
- To have some practice in interviewing to develop interviewing skills the researcher needs to elicit information.
- To be familiar with some interviewing techniques such as probing for more information from learners.
- To clarify any ambiguity related to questions wording.
- To look into the order of the interview guide.

During March 2006, the group interviews were conducted in two sessions. The HVK group attended the first session which took place in a quiet room at the department of English language. These learners were asked about their vocabulary learning strategies that included all the VLSQ items. It took more than two hours to go over all the interview questions. After listening carefully to the tapes, it was decided to shift the focus on the

deep VLS that are difficult to use for learners and exclude the shallow ones that are easy to use for learners. In doing so, the researcher would give more time to the deep strategies, spend less time in interviews, and retain learners' attention when spending less time in general. So in the second session with the LVK group which took place a week later, the researcher could manage to finish in 90 minutes.

3.5.3. Summary of the benefits gained from pilot study

- In the UK pilot study one of the subjects was not sure of the meaning of the VLSQ item # 1 (I identify the part of speech of the new word to help me know its meaning), so an example (verb, noun, adjective) was added to make it more comprehensible.
- The experience of piloting the vocabulary tests showed that the 10,000 word range was beyond the subjects' proficiency level, so it was decided to exclude this level for the main study.
- The two out of three topics to write about in the FPA test were determined.
- The time needed for each vocabulary test was identified.
- The FPA test proved to be valid and reliable in measuring the EFL learners' productive vocabulary since it significantly correlated with the VLT and CPA tests in the pilot study conducted in Libya.
- The approximate time needed for the group interviews was anticipated.
- Piloting the interviews showed that there was no need to focus on all the items of the VLSQ so shallow VLS were excluded and focus became more on deep VLS.

3.6. The Main Study

The main study took place during February and March 2006. It was composed of two parts: quantitative and qualitative. The quantitative part included the Vocabulary Learning Strategies Questionnaire (VLSQ), the Motivation test, the Vocabulary Levels Test (VLT), the Vocabulary Size Test of Controlled Productive Ability (CPA) and the Vocabulary Size Test of Free Productive Ability (FPA). The qualitative part included the semi-structured interviews with a sub-sample of the subjects representing three different proficiency levels (high, middle, and low) on the basis of their vocabulary knowledge scores. The quantitative part was conducted in two settings: the main setting involved the 4th year students majoring in English language at the 7th of April University in the city of Zawia (Group A); the complementary setting involved the 4th year students majoring in English language at the 7th of April University in the city of Sabratha (Group B). The same procedures for data collection were followed in both settings. Table 3.6 illustrates the instruments of data collection that were used to answer each research question.

Table 3.6: data collection instruments used to answer research questions. Tests with an asterisk have been taken from published sources, as described above, which have tested their reliability and validity

Research Questions	Instrument(s)
RQ1: What is the range and frequency of VLS used by the Libyan EFL learners?	VLSQ*
RQ2: How do EFL learners view their vocabulary learning and how this affects their vocabulary knowledge?	VLSQ*, Semi-structured interviews and VLT test*, CPA test* and FPA test
RQ3: What is the Libyan EFL learners' vocabulary knowledge in terms of reception, controlled production and free production and how do these relate to one another?	VLT test*, CPA test* and FPA test
RQ4: Is there a correlation between the Libyan EFL learners' vocabulary knowledge and their use of VLS?	VLSQ* , Semi-structured interviews and VLT test*, CPA test* and FPA test
RQ5: Is there relationship between the learners' motivation to learn English, their use of VLS and their vocabulary knowledge?	VLSQ*, VLT test*, CPA test* and FPA test and Motivation test*

3.6.1. Sampling of Subjects

The type of sampling thought to be appropriate for the study in hand was *Convenience or Opportunity Sampling*, which means that the convenience for the researcher is an essential criterion of the selection. Convenience sampling involves selecting the closest subjects and continuing that procedure until the researcher gets the required number of subjects (Cohen and Manion, 1994). Dornyei (2003) states that in this type of sampling which is very common in L2 research, the researcher intentionally selects this sample due to the ease of accessibility and that the subjects have the characteristics required for this investigation. As far as the study in hand is concerned, the selection of a convenience sampling was based on the following reasons:

- The researcher was a member of the teaching staff at English language department, Faculty of Arts, The 7th of April University, Zawia, Libya for three years which are quite enough for familiarity with the setting and for ease of accessibility.
- The university is close to where the researcher lives.
- For more subjects, the researcher chose the department of English language in the city of Sabratha due to ease of accessibility which was granted by a colleague cooperating with that department, and the fact that this department belongs to the main university.
- Due to time constraints, it would be very difficult for the researcher to select more than one university.
- Finally, all university students must have passed the Intermediate Education level, so it was thought that students should to certain extent have the same proficiency level of English at least when they join the English departments all over the country, so similarity among students in the Libyan universities can be assumed.

3.6.2. The Subjects

The subjects of this study were all the undergraduate students (112 students) majoring in English as a foreign language at the 7th of April University, Libya. They were 4th year students, i.e. in their final year of study, and represented two English language departments at the 7th of April University in the cities of Zawia and Sabratha. Zawia students (Group A) were 56 (6 males and 50 females), intended to be 60 (the total number), but one did not turn up while three were excluded for various reasons as described later in Section 3.7. Sabratha students (Group B) were 56 (6 males and 50 females) who turned up of the total number of 71 students. So coincidentally the two groups were identical in the number of students as well as their gender. Their age ranged from 20 to 45 with a mean age of 22.24 (SD = 3.39) for group A (GA) subjects and from 20 to 42 with a mean age of 21.97 (SD = 3.24) for group B (GB) subjects. Most of the subjects were in their twenties (20-23 years) so they reflect the actual age of university students.

Some factors have been taken into account by the researcher regarding the choice of subjects. First, they were in a position, as current English learners, to bring in their immediate experience in language learning. Second, having spent three years learning English at university level, 4th year students should have more experience than their counterparts in other levels, so they would have their own beliefs about language learning, particularly VLS. Third, they should have received their pre-college English learning in an EFL setting in order to reflect the actual situation of English learning in Libya. Therefore, the subjects who have learnt English abroad (if any) would be excluded. This would help us discover the VLS used by EFL learners at this stage of their study and could help make more generalizations in terms of findings.

3.7. Data Collection Procedures

Prior to data collection processes, the researcher met with the University authorities and was given permission to conduct the study. Then, he met with the head and the teaching staff of the English language department in both faculties who extended their cooperation to the researcher. They arranged a meeting with the students to be seen at their regular classes in both faculties in order to explain the aim of the project to them a week before conducting the study. Once the students expressed satisfaction and familiarity with the methods of data collection, the study was conducted during February and March, 2006. Out of the targeted 115 students in both faculties, three group A (GA) students could not complete the tests: one was not feeling well; another one had to leave while she was doing the first test because one of her relatives passed away that day; while the other was a native English speaker so she was excluded. Therefore, 112 subjects turned up.

The first session involved the English majors in Zawia (GA) who were divided into two groups of 30 and 26 (presumably 29). The second session involved the English majors in Sabratha (GB) who in turn were divided into two groups of 29 and 27. Both sessions of the study were conducted at 9.30am with three teaching staff members who volunteered to help and whose cooperation was highly appreciated. In the first step, the researcher explained briefly the aim of this study saying that he would like to identify the Libyan EFL learners' vocabulary learning strategies in relation to their vocabulary knowledge, and this would involve administering some tests, a questionnaire, and interviews. Subjects were also assured that their responses would be confidential and had nothing to do with the assessment of their academic study. The procedures for administering the tests, the questionnaire, and the interviews in both sessions were as follows:

3.7.1. The FPA, CPA, and VLT

- The vocabulary tests as an instrument for data collection, were administered before the vocabulary learning strategies questionnaire (VLSQ) and the interviews because it was thought that subjects' performance might be influenced by the items of the VLSQ or the issues discussed in the interviews, in particular students might use some discovery strategies that they would not usually use (e.g. breaking a word up).
- The vocabulary tests were administered beginning with the FPA, CPA, and VLT respectively. The researcher deliberately started with measuring the learners' productive vocabulary knowledge, because it was thought that subjects performance might be influenced by the items they would see in the VLT (receptive knowledge) if the VLT was conducted first.
- First, the FPA was administered to determine the learners' vocabulary size in free productive situations. The subjects were kindly requested to write down as many words as possible related to two topics: (1) parts of the body, and (2) learning and teaching English. The time allotted for this test was 10 minutes.
- In order to link the results of the FPA with the other tests and the VLSQ, every FPA test was given a number before being distributed to the subjects and they were asked to memorize their numbers and write them on top of the following tests.
- Second, the CPA test was administered with the aim of estimating the learners' vocabulary size in controlled productive situations at the three word frequency levels (2000, 3000, 5000) and the UWL. The subjects were required to supply the missing target word in the text provided. The time allotted for this test was 50 minutes.

- Third, the VLT test was administered with the objective of measuring the learners' receptive vocabulary at the three word frequency levels (2000, 3000, 5000) and the UWL. The subjects were asked to select three out of six words and match them with their definitions. The time allotted for this test was 50 minutes.
- The researcher checked all papers making sure that the subject numbers were written on top of page one for each test.

3.7.2. Scoring the Vocabulary Tests

- The grading for the FPA is in terms of correct/ incorrect for each item. Each subject had three scores: a score for the number of correct items for each of the two topics (parts of the body, and learning and teaching English) and a Total score for correctly written items. Minor spelling mistakes were ignored.
- The CPA sampled 18 items at each of the 2000, 3000, 5000 word levels, and University Word List (UWL), whereas the VLT sampled 30 items at each of these three word frequency levels and the UWL. The grading for the CPA and the VLT tests was in terms of correct/ incorrect for each item. Minor spelling mistakes and grammatical mistakes in the CPA test were not marked as incorrect. Each subject had five scores: a score for the number of correct items at each of the four levels and a Total score for correctly retrieved items.

The aims of scoring the vocabulary tests were, first to know the learners' vocabulary knowledge in terms of reception, controlled production and free production; then, to select the students to be interviewed on the basis of their vocabulary knowledge. So after scoring, 15 students were selected and categorized into three groups of five according to their vocabulary knowledge:

- The subjects with high vocabulary knowledge represent the 5 students who had the highest scores of all the students.
- The subjects with medium vocabulary knowledge represent 5 students whose scores were in the middle, i.e. between the highest and the lowest scores.
- The subjects with low vocabulary knowledge represent the 5 students who had the lowest scores of all the students.

One point to make clear is that the categorization of high, moderate and low vocabulary knowledge learners was based on the researcher's own criterion and not on any other criteria such as Schmitt et al.'s (1988) criterion mastery level of 87% for the Vocabulary Levels Test (VLT). The top 5 subjects with a mean percentage of 79% in the VLTtotal (range = 74-86), I defined as high vocabulary knowledge (HVK) students; the moderate 5 subjects with a mean percentage of 42% in the VLTtotal (range = 39-46), I defined as moderate vocabulary knowledge (MVK) students; the bottom 5 subjects with a mean percentage of 19% in the VLTtotal (range = 14-23), I defined as low vocabulary knowledge (LVK) students. Since the results of the relationship between the VLT scores and the CPA scores in both pilot study and main study show significant correlations across all word frequency levels (see Chapter 5, Section 5.5.4), the learners' scores in the VLT were considered as the criterion of the learners' vocabulary knowledge in terms of the subjects to be selected for interviews. See appendix 7, page 280 for student interviewees' raw scores in the three vocabulary tests: VLT, CPA and FPA.

3.7.3. The VLSQ and the Motivation Test

Having finished three vocabulary tests, the researcher took into consideration that the subjects would be too tired to fill in the vocabulary learning strategies questionnaire

(VLSQ) and the motivation test items and their responses would negatively be affected if they were asked to do so immediately after completing the vocabulary tests. Thus, subjects were asked to take the VLSQ and the motivation test home for two main reasons: first, to take a break after the tests, and second to have enough time to respond accurately and honestly to the items. One point to establish is that the VLSQ were presented to students in jumbled order, i.e. not with logical groups because it was thought that students would go through a different strategy each time and this requires paying specific attention to each single strategy, so their responses would be more accurate. On the other hand, if it happened to be presented in their logical groups, the items would be easier to understand for students, but students may not pay enough attention to each single strategy and may think of strategies as a group that should be answered similarly. Thus, students just keep ticking one or two out of 6-point scale responses, rather than selecting the answer that indicates how often they have used each single strategy.

The processes of administering the VLSQ and the motivation test were as follows. After completing the vocabulary tests and collecting the papers, the VLSQ and the motivation test were delivered to the subjects by hand, that is, a group administration, which is very common in L2 research (Dornyei, 2003). First, the researcher asked the subjects to go over the items to make sure that they had got the right pages. Then, they were asked to write their numbers (numbers used in vocabulary tests) on top of the first page of the VLSQ questionnaire and the motivation test. After that, the researcher spent some time explaining the way they fill in the VLSQ and the motivation test and learners were given opportunities to ask if they had any question. Finally, they were requested to hand back their copies the next day, and most of them did so, while some others handed theirs two

days later. Out of 112 copies distributed to subjects, 11 were missing (4 from GA, and 7 from GB).

3.7.4. Scoring the VLSQ and the Motivation Test

There are several different ways of scoring such data. For example, Schmitt (1997) used percentages for scoring and presenting his questionnaire data; Gu and Johnson (1996) provided raw scores represented by the mean and the standard deviation for different subcategories of strategies. For the current study I prefer giving the raw scores for each single strategy, as the number of participants is limited: 112 divided into two equal groups, giving raw scores is more appropriate because it reflects actual scores, and it is more straightforward for the readers than giving percentages. Hence, the VLSQ frequency responses were scored following a scale of 0 to 100. 100 was given for 'always', 80 for 'usually', 60 for 'often', 40 for 'occasionally', 20 for 'seldom', and 0 for 'never' (6 point scale). For more details, see Chapter four: Section 4.2.

The motivation test was scored by following a scale of 1 to 7 for each item. 1 was given for *Strongly Disagree,* 2 for *Moderately Disagree,* 3 for *Slightly Disagree,* 4 for *Neutral* , 5 for *Slightly Agree,* 6 for *Moderately Agree,* and 7 for *Strongly Agree.* This means that the maximum score for both motivation tests (integrative and instrumental) is 28 (7 scores multiplied by 4 items).

3.7.5. Semi-structured Interviews

The semi-structured interviews were conducted to elicit more information about how Libyan EFL learners go about learning vocabulary. During the distribution of the last

vocabulary test, the subjects were given a form to write their numbers and/or names and sign in if they agree to be interviewed; unfortunately only a few students in both groups were willing to be interviewed. This is definitely due to religious and cultural constraints (e.g. gender; privacy). Hence it was thought it would be better to interview them as a group rather than as individuals, in order to reduce their tension and hesitation. Thus, they had been told that interviews would be conducted in groups of five and all of them felt more comfortable with this alternative.

The researcher and the members of the teaching staff had discussed some issues related to the interviews process such as when, where and how they could be conducted. After identifying the sub-sample from the subjects, 15 subjects represented three groups of five were selected according to their vocabulary test scores, as described earlier in Section 3.7.2. The subjects to be interviewed were visited during their regular classes and informed that they were selected randomly according to their vocabulary knowledge scores, that they would be interviewed as a group. Arrangements concerning place and time of interviews for each of the three groups were made two days before the time of interviews. During March, 2003 the first two sessions involved two groups: the high vocabulary knowledge (HVK) group and the moderate vocabulary knowledge (MVK) group, and were conducted in one day from 10:00 am until 2:30 pm. Then, the third session involved the low vocabulary knowledge (LVK) group that was conducted the next day from 11:00 to 1:00. Each session took about two hours to finish.

A top down approach was followed, i.e. the interviews started off with more general questions (part one) moving towards more specific ones (part two), see appendix 6. Having their copies of the VLSQ during the interview, interviewees were asked to

comment on their use of strategies in general. The focus was particularly on certain deep strategies (see appendix 6). Then, they were allowed to express their opinions about any strategy either covered or not covered in the questionnaire as well as any inquiry about the study in general.

Since interviews were conducted as a group, this may raise issues concerning validity of what people say when others are listening and the independence of information from each subject. Also there might be problems with quiet participants who tend to be quiet or overly prominent participants. However, first of all the topic is not dealing with so sensitive issues like eliciting information about private lives that require a great degree of privacy and that group interviews might cause discomfort for participants. Second, the interviews were conducted as informally as possible to provide learners with a supportive environment so that they could express themselves easily. Third, the researcher kept pointing at interviewees, especially the quiet ones, to take their turns one by one. Fourth, he also kept reminding them that there are individual differences among learners in terms of use of VLS and learners always have different opinions regarding learning strategies in order to encourage them express their ideas comfortably.

Thus, during the interviews, the researcher expected that learners would be very comfortable to be interviewed as a group; especially all the interviewees were females, except group 2 which included one male and four females. Interviewees did not show any sort of shyness or hesitation; this was shown clearly from their responses to the items where they could give detailed information about their learning strategies and support or contradict each other's ideas. Supporting and contradicting one another's ideas satisfied the researcher's expectations and made him feel quite confident that learners were not

negatively affected by being interviewed as a group. On the contrary, the researcher claims that group interviews would be much more appropriate alternative than individual interviews for such learners with specific cultural constraints.

3.8. Data Analysis Procedures

This section very briefly presents the procedures of data analysis.

3.8.1. VLSQ, Vocabulary Tests, and Motivation Test

- Descriptive analysis of the vocabulary learning strategies questionnaire (VLSQ) items to identify the overall pattern of VLS used by the respondents;
- Descriptive analysis of the scores of the three vocabulary test: VLT, CPA and FPA;
- Descriptive analysis of the motivation test scores: integrative motivation, instrumental motivation and Total motivation score;
- Correlation analysis between all vocabulary test scores to see how learners' vocabulary knowledge in terms of reception, controlled production and free production relate to one another;
- Correlation analysis between the VLS and the vocabulary knowledge: VLT, CPA, and FPA, to see how learners' VLS relate to their vocabulary knowledge;
- Correlation analysis between motivation scores, VLS and vocabulary scores.

3.8.2. Interview Analysis

Interview data were not coded. After transcription, interviews were mainly used to help interpret the results of VLS used by learners as well as their scores in three vocabulary tests and to see how high/moderate/low vocabulary knowledge learners view their

vocabulary learning and how this affects their vocabulary learning. Part two of the interviews that particularly deals with the subjects' use of VLS will be used in presenting the results of the VLSQ. Then part one that seeks general information about student interviewees' general feelings about vocabulary as an aspect of learning a language will be analyzed.

As mentioned earlier, student interviewees were divided into three groups according to their vocabulary knowledge scores: group 1 (high vocabulary knowledge (HVK) group), group 2 (moderate vocabulary knowledge (MVK) group) and group 3 (low vocabulary knowledge (LVK) group) (see Chapter three, Section 3.4.4). When providing quotations, students' initials will be used plus numbers 1, 2, or 3 that indicate which group. Quotations originally in Arabic were translated into English, written in italics and put in brackets; quotations in English were put in quotation marks.

3.9. Ethical Issues

The word *ethics* often suggests a set of standards by which a particular group or community decides to regulate its behaviour, to distinguish what is legitimate or acceptable in pursuit of their aims from what is not (Cohen et al., 2000). Prior to conducting the study, the following steps related to ethical issues were followed:

- I had obtained the informed consent to conduct the study from both the university authorities and the subjects before beginning the data collection.
- I explained to the subjects the aims of the study and secured confidentiality and promised that this study would not interfere in any way with their on-going study and anonymity was guaranteed.
- Subjects were allowed to withdraw from the study whenever they want to do so.

- Considering religious, cultural and social constraints, I conducted group interviews rather than individual interviews, excluded video-taping female subjects, and employed audio-taping which was preferred by those subjects.
- With respect to data presentation and analysis, I tried my best to avoid any misinterpretation that may occur either consciously or sub-consciously.

3.10. Chapter Summary

This chapter dealt with the method used to conduct this study. First, it presented the research questions where the hypothesis for each research question was outlined. This is followed by the research design of the current study (descriptive research) which is schematically placed in the middle of the continuum between the qualitative and the experimental research designs. The data collection instruments associated with descriptive research, utilized in the current study included three vocabulary tests (VLT, CPA and FPA), a motivation test, VLS questionnaire, and semi-structured interviews. Then, it outlined the two pilot studies conducted in UK and Libya, which revealed some benefits. For example, piloting the vocabulary tests showed that the 10,000 word range was beyond the subjects' proficiency level, so it was decided to exclude this level for the main study; the two out of three topics to write about in the FPA test were determined; the time needed for each data collection procedure was identified. This is followed by the main study where information about sampling and subjects was provided. Finally, the procedures for data collection and analysis, and the ethical issues to be taken into consideration were outlined. The results will be presented in the following two chapters (4 and 5).

CHAPTER FOUR

Analysis of Vocabulary Learning Strategies Questionnaire and Interviews Data

4.1. Introduction

This chapter presents the analysis of the data from the vocabulary learning strategies questionnaire (VLSQ) and the data from the interviews which were mainly used as a supplement to the VLSQ data. The descriptive statistics were utilized to explore the range and the frequency of use of the vocabulary learning strategies (VLS) used by the Libyan EFL learners. The VLS were analyzed in terms of five categories: (1) determination strategies, (2) social strategies, (3) memory strategies, (4) cognitive strategies, and (5) metacognitive strategies, as described in Chapter two, Section 2.2.1.4, page 31. These five categories include 44 actual strategies, which were grouped into subcategories to be more manageable. I will also make use of part two of the interviews, which seeks in-depth information about the VLSQ items (for more information, see Chapter three, Section 3.7.5). This is followed by analyzing students' rating of the most helpful VLS for them, and the other strategies they might use which were not covered in the VLSQ if any. Finally, analysis of part one of the group interviews which seeks general information about student interviewees' feelings about vocabulary as an aspect of learning a language will complete this chapter.

4.2. Data analysis

The VLSQ analysis is based on 101 completed questionnaires that were returned out of the 112 that were distributed to the two English major groups (a response rate of 90%): Zawia students or group A (GA) based on 52 returned out of 56, and Sabratha students or group B (GB) based on 49 returned out of 56. Scores are then based on 52 and 49 people,

unlike those for the next chapter on vocabulary tests analysis which are based on the full 112. While the two groups will be kept separate in presenting the results, they will be compared where appropriate. The reason for not treating them as a single group, as we shall see, is that there were certain unexpected differences between the groups' responses to the VLSQ items, to be discussed later in Chapter 6, Section 6.4.2. By conducting the Mann-Whitney test, the results showed that some differences between the two groups in terms of VLS use (10 out of 44 VLS) were significant, see Appendix 11, page 289.

The VLSQ items were analyzed by utilizing descriptive statistics generally used for analyzing data obtained from descriptive research (Seliger and Shohamy, 1989). The VLSQ responses were scored using a score scale of 0 to 100. 100 was given for 'always', 80 for 'usually', 60 for 'often', 40 for 'occasionally', 20 for 'seldom', and 0 for 'never' (6 point scale). The score average for each of the five categories was calculated by dividing the total mean scores of the strategies by the number of strategies. For example, to calculate the score average for the category of cognitive strategies, we add the total mean scores for the five strategies of this category (68+59+39+34+37) and then divide it by the number of strategies, i.e. 5, to get a score average 47.4, i.e. about 47. The mean score for each strategy was calculated by dividing the subjects' total scores by the number of the subjects. The way total scores were measured was by adding together the scores for all the subjects' responses for each strategy. Table 4.2 below shows the two groups' score averages for each category and for the grand mean.

Table 4.2: Score averages of the five categories

Category	Score Average Group A	Score Average Group B
Determination strategies	**56**	**58**
Social strategies	**33**	**39**
Memory strategies	**47**	**52**
Cognitive strategies	**47**	**58**
Metacognitive strategies	**40**	**51**
Grand mean	**45**	**52**

Regarding the interviews, as mentioned in Chapter 3, Section 3.4.4, the 15 student interviewees were divided into three groups of five: the high vocabulary knowledge group (HVK), the moderate vocabulary knowledge group (MVK), and the low vocabulary knowledge group (LVK). Their responses will be presented at the end of each strategy they were asked about and will be compared where appropriate.

4.3. Determination strategies

As we see in table 4.2 above, the use of the category of determination strategies comes at the top compared to the other categories by both groups of respondents. It received a score average of 56 from group A (GA) and 58 from group B (GB). Table 4.3 below shows the mean scores for each of the nine determination strategies included in the VLSQ; these strategies are grouped under six subcategories:

- **Identifying part of speech**
  1. Identifying the part of speech of the new word.

- **Breaking the new word up into the main parts,**
  2. Breaking the new word up into the main parts.

- **Checking for L1 cognate**
  3. Checking for L1 cognate

- **Analyzing available pictures and gestures**
  4. Analyzing available pictures.
  5. Analyzing any available gestures.

- **Using dictionaries**
  6. Using a bilingual dictionary (English / Arabic).
  7. Using a bilingual dictionary (Arabic / English).
  8. Using a monolingual Dictionary (English / English).

- **Guessing meaning from context**
  9. Guessing the meaning of the word from context.

Table 4.3: Use of determination strategies

Determination Strategies	Group A (Ss: 52)		Group B (Ss: 49)	
	Mean scores	Std. Deviation	Mean scores	Std. Deviation
identifying part of speech	57	31	52	33
breaking word up into main parts	52	34	47	29
checking for L1 cognate	38	32	46	33
analyzing available pictures	46	32	45	29
analyzing available gestures	49	29	49	32
using bilingual dictionaries (English Arabic)	76	28	86	20
using bilingual dictionaries (Arabic English)	31	28	66	36
using monolingual dictionaries	63	33	56	34
guessing meaning from context	81	18	73	23

Ss=students

4.3.1. Identifying Part of Speech

The identifying strategy is quite frequently used by the respondents, with a mean score of 57 for group A (GA) respondents and 52 for group B (GB) respondents. The majority of

the respondents reported a very frequent use of identifying part of speech. On the other hand, only ten out of 52 GA respondents and 14 out of 49 GB respondents reported a very infrequent use of this strategy as illustrated in figures 4.3.1a and 4.3.1b.

In responding to the use of identifying part of speech, some of the high vocabulary knowledge (HVK) interviewees (responses: 2 occasionally, 1 often, 1 usually and 1 always) and the moderate vocabulary knowledge (MVK) ones (responses: 2 often and 3 usually) indicated that identifying part of speech is helpful in knowing the meanings of words as well as using the newly learned words in sentences, whereas some of the low vocabulary knowledge group (LVK) (responses: 1 never, 1 seldom, 1 occasionally, 1 often, and 1 usually) said that it is easy to find out the part of speech, so they do not need to concentrate on this strategy.

Fig. 4.3.1a. Identifying parts of speech (Group A)

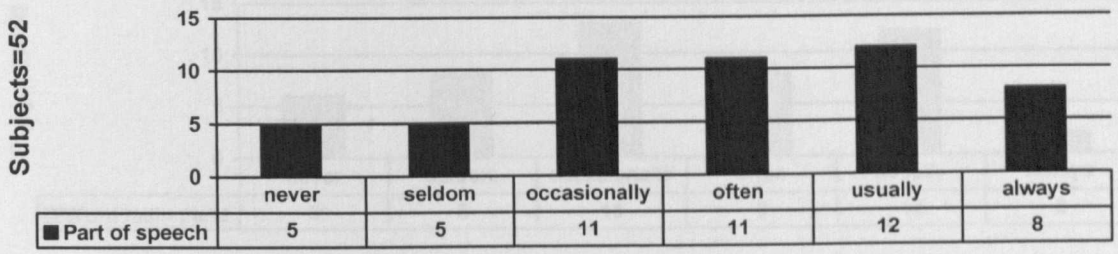
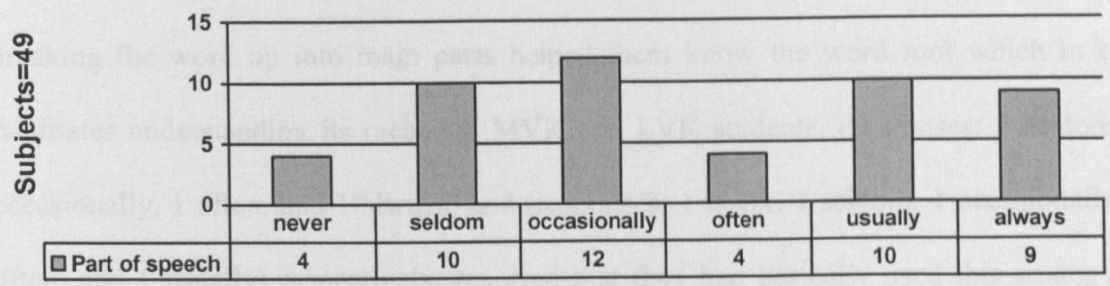


Fig. 4.3.1b. Identifying parts of speech (Group B)



4.3.2. Breaking the New Word up into the Main Parts

This strategy is not so frequently used by both groups. It received a mean score of 52

from GA respondents and a mean score of 47 from GB respondents. With respect to GA, responses can be divided into almost three equal categories: (1) 19 out of 52 respondents reporting that they either never or seldom used this strategy; (2) 15 students a frequent usage of this strategy; and (3) 18 a very frequent usage. For GB, the majority (21 out of 49) reported a frequent use, whereas 14 reported a very frequent and the other 14 reported a very infrequent use of this strategy as shown in figures 4.3.2a and 4.32b below.

Fig. 4.3.2a. Breaking the word up into main parts (Group A)

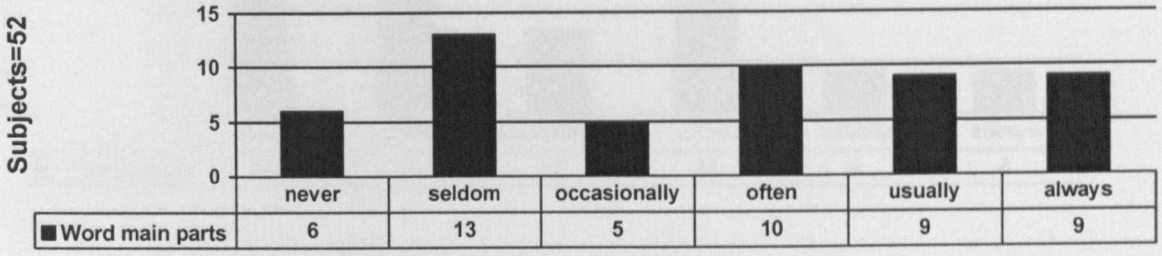
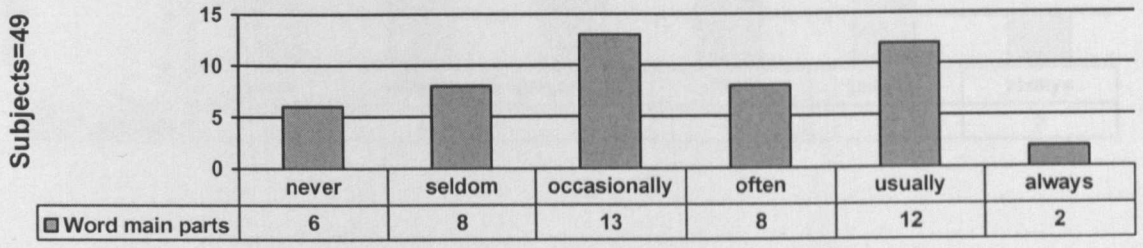


Fig. 4.3.2b. Breaking the word up into main parts (Group B)



HVK student interviewees (responses: 2 never, 1 seldom, 1 often, and 1 usually) said breaking the word up into main parts helped them know the word root which in turn facilitates understanding its meaning. MVK and LVK students, (responses: 2 seldom, 1 occasionally, 1 often, and 1 always) and (responses: 1 never, 1 seldom, 1 occasionally, 1 often, and 1 usually) respectively, reported that they had basically used this strategy to help them read the long words and sometimes to understand meanings.

4.3.3. Checking for L1 Cognate

This strategy comes bottom but one of the determination strategies in terms of use by both groups, with a low mean score of 38 for GA and 46 for GB. 25 respondents from GA reported that they had either never or seldom used it compared to 18 GB respondents reporting so. Figures 4.3.3a and 4.3.3b show more raw scores.

Fig. 4.3.3a. Checking for L1 cognates (Group A)

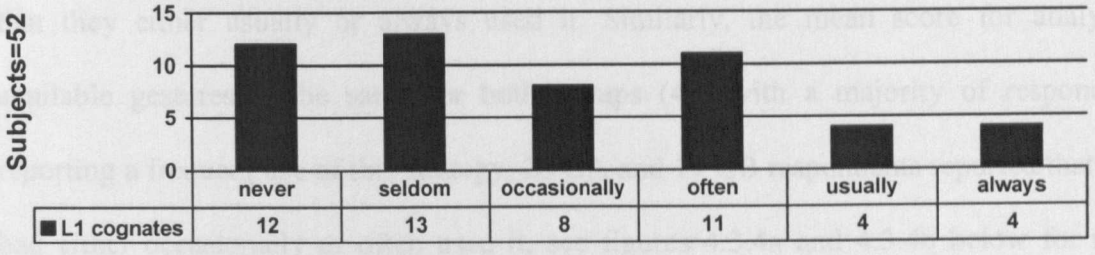
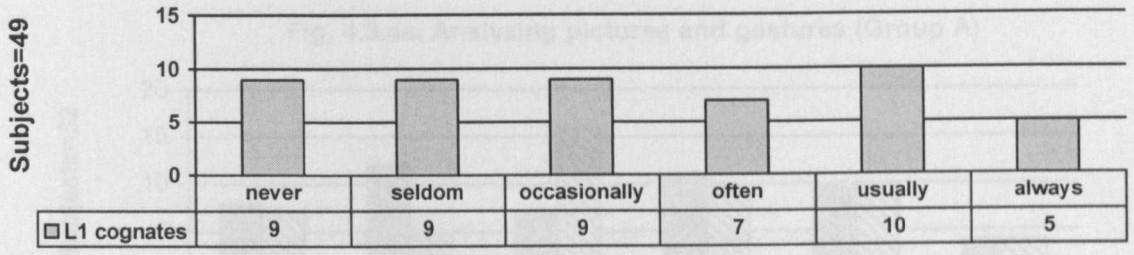


Fig. 4.3.3b. Checking for L1 cognates (Group B)

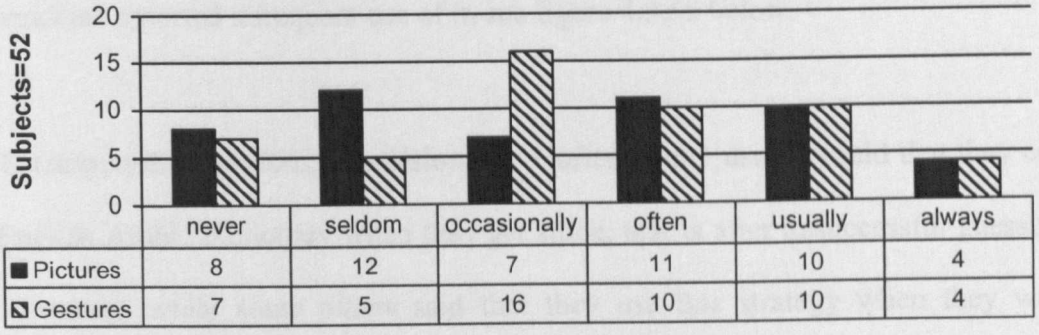


Most of HVK and MVK students, their responses were (3 never, 1 seldom, and 1 usually) and (1 seldom, 3 occasionally, 1 often) respectively, said that it is not easy to depend on such a strategy because the two languages are far from each other. While two LVK students (responses: 1 never, 1 seldom, 2 often, and 1 usually) indicated that they had used this strategy first to understand and then to remember the meaning of some new words such as the L2 word *tea* in Arabic *shai* or *alcohol* similarly in Arabic *alcohol*; these words are very close in sound and meaning.

4.3.4. Analyzing Available Pictures and Gestures

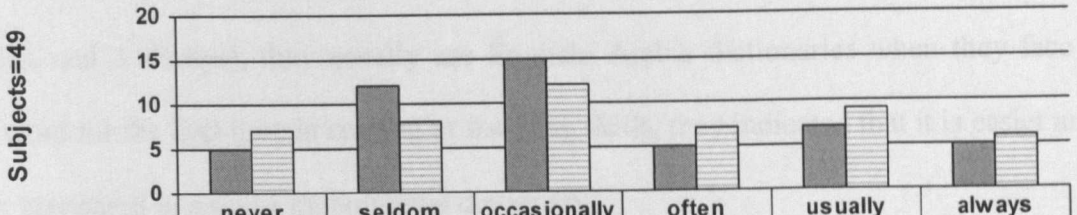
The VLSQ included two strategies for analyzing available pictures and gestures: (1) analyzing available pictures, and (2) analyzing available gestures. The first strategy received almost the same mean score from both groups (46 by GA and 45 by GB). 20 GA respondents compared to 17 GB respondents reported that they had either never or seldom used it. On the other hand, 14 GA respondents and 12 GB respondents reported that they either usually or always used it. Similarly, the mean score for analyzing available gestures is the same for both groups (49) with a majority of respondents reporting a frequent use of this strategy; 26 GA and 19 GB respondents reported that they had either occasionally or often used it, see figures 4.3.4a and 4.3.4b below for more scores.

Fig. 4.3.4a. Analyzing pictures and gestures (Group A)



	never	seldom	occasionally	often	usually	always
Pictures	8	12	7	11	10	4
Gestures	7	5	16	10	10	4

Fig. 4.3.4b. Analyzing pictures and gestures (Group B)



	never	seldom	occasionally	often	usually	always
Pictures	5	12	15	5	7	5
Gestures	7	8	12	7	9	6

4.3.5. Using Dictionaries

The VLSQ included three strategies for using dictionaries: (1) using bilingual dictionaries (English/Arabic), (2) using bilingual dictionaries (Arabic/English), and (3) using monolingual dictionaries (English/English).

Compared to the other strategies of this category (determination strategies), the use of English/ Arabic dictionaries was the second most frequently used strategy by GA respondents with a mean score of 76. 38 out of 52 GA respondents reported a very frequent use of this strategy whereas only one respondent said that s/he never used this strategy as shown in figure 4.3.5a below. Similarly, with a mean score of 86, using English Arabic dictionaries was the most frequently used strategy by GB respondents. Out of 49 respondents, 39 reported a very frequent use of it while the other ten respondents reported a frequent use of it, see figure 4.3.5b below.

HVK (responses: 2 seldom, 1 occasionally, 1 often, and 1 usually) said that they consult an English Arabic dictionary when they get stuck, that is after unsuccessful guessing for the meaning, while some others said that they use this strategy when they want to translate from English into Arabic, especially in translation courses. According to MVK (responses: 1 often, 3 usually, and 1 always), and LVK (responses: 1 occasionally, 1 usually, and 3 always), they usually use English/ Arabic dictionaries when they face a new word for the first time in reading or listening skills, they indicated that it is easier and faster compared to using a monolingual dictionary.

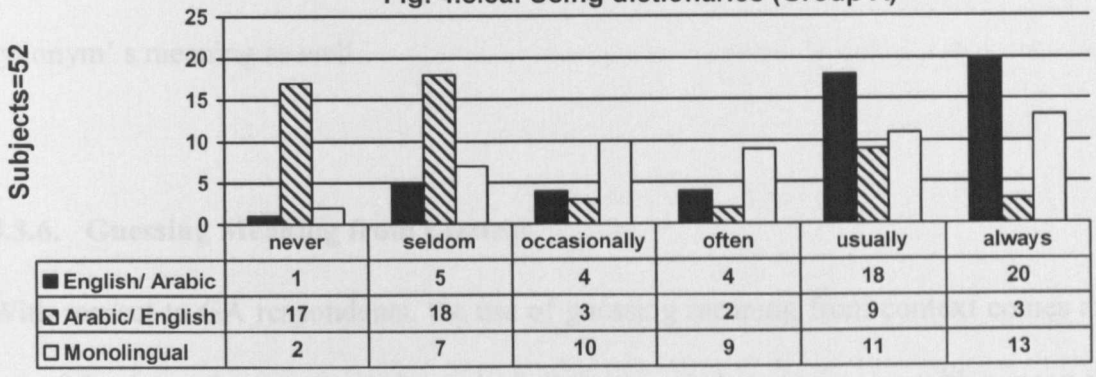
On the other hand, using bilingual dictionaries (Arabic/English) was the least frequently used determination strategy for GA respondents with a low mean score of 31. The vast

majority of respondents (35 respondents) reported that they either never or seldom used it as shown in figure 4.3.5a below. Unlike GA respondents, GB respondents reported a fairly frequent use of Arabic/English dictionary with a mean score of 66. 29 out of 49 GB respondents reported a very frequent use of this strategy whereas 10 respondents reported infrequent use of it as illustrated in figure 4.3.5b below. The Mann-Whitney test results showed that the difference between the two groups in terms of Arabic English dictionary use was significant, see appendix 11, page 289.

HVK students (responses: 2 never, and 3 seldom) said that they did not use this strategy; even though three of them responded 'seldom' which meant that their infrequent use is particularly restricted to translation tasks from Arabic to English as activities in translation modules. However, the MVK respondents (responses: 3 seldom, 1 usually and 1 always) and the LVK respondents (responses: 1 never, 1 seldom, 2 occasionally, and 1 usually) who used it said that they consult an Arabic/ English dictionary only when they do not know an English word that they need while they are involved in writing activities, especially when they are asked to write about unfamiliar topics, or when they want to translate from Arabic to English in translation tasks. One MVK student (S2) commented saying (*the Arabic words are always there but the English words sometimes cannot be recalled*).

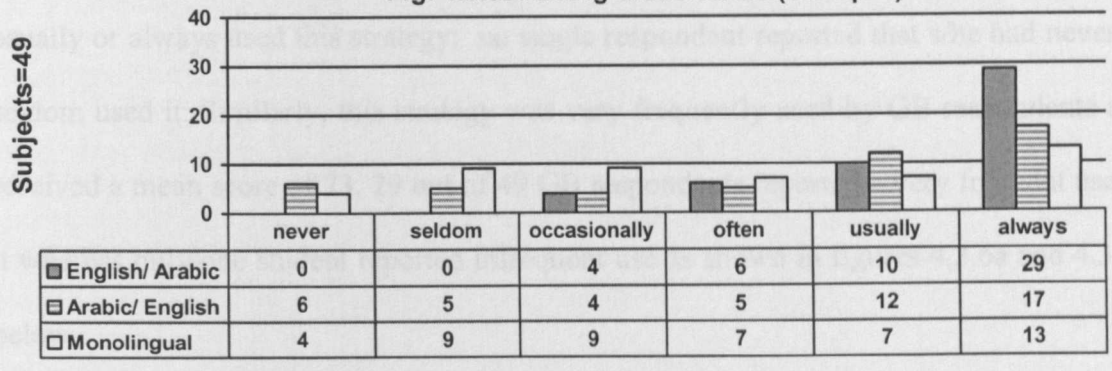
Regarding using monolingual dictionaries, respondents reported a fairly frequent use of this type of dictionaries with a mean score of 63 for GA and 56 for GB. Most responses indicated that students' usage ranged from occasionally to always (see figures 4.3.5a and 4.3.5b below).

Fig. 4.3.5a. Using dictionaries (Group A)



	never	seldom	occasionally	often	usually	always
English/ Arabic	1	5	4	4	18	20
Arabic/ English	17	18	3	2	9	3
Monolingual	2	7	10	9	11	13

Fig. 4.3.5b. Using dictionaries (Group B)



	never	seldom	occasionally	often	usually	always
English/ Arabic	0	0	4	6	10	29
Arabic/ English	6	5	4	5	12	17
Monolingual	4	9	9	7	7	13

HVK respondents (responses: 1 seldom and 4 always) valued highly the use of monolingual dictionaries and said that this strategy helped them acquire more vocabulary and know more information about the newly learned words. They also indicated that using this strategy requires an effort which eventually helps them to put the newly learned words into the long-term memory. MVK respondents (responses: 1 seldom, 1 occasionally, 2 often, and 1 usually) stated that their use of monolingual dictionaries had two causes, first, for knowing how to pronounce the new words since such dictionaries provide such information where words are written phonetically, and second, for getting synonyms. On the other hand, LVK respondents (responses: 4 seldom, 1 occasionally) said that it would be difficult to understand the meaning by using monolingual dictionaries. Some commented that using this strategy makes things more complicated,

instead of looking for the meaning of one word they got involved in looking for the synonym' s meaning as well.

4.3.6. Guessing Meaning from Context

With respect to GA respondents, the use of guessing meaning from context comes at the top of the determination strategies and of all the reported strategies use with a mean score of 81 as shown in table 4.3 above. 40 out of 52 respondents reported that they had either usually or always used this strategy; no single respondent reported that s/he had never or seldom used it. Similarly, this strategy was very frequently used by GB respondents and received a mean score of 73. 29 out of 49 GB respondents reported a very frequent use of it whereas only one student reported infrequent use as shown in figures 4.3.6a and 4.3.6b below.

Fig. 4.3.6a: Guessing from context (Group A)

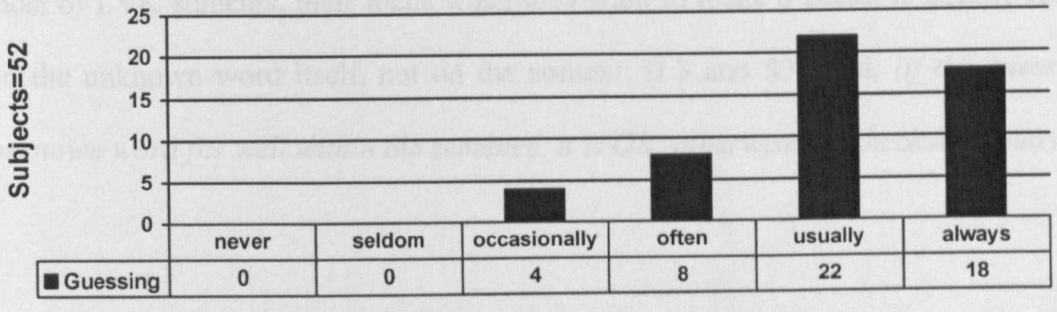
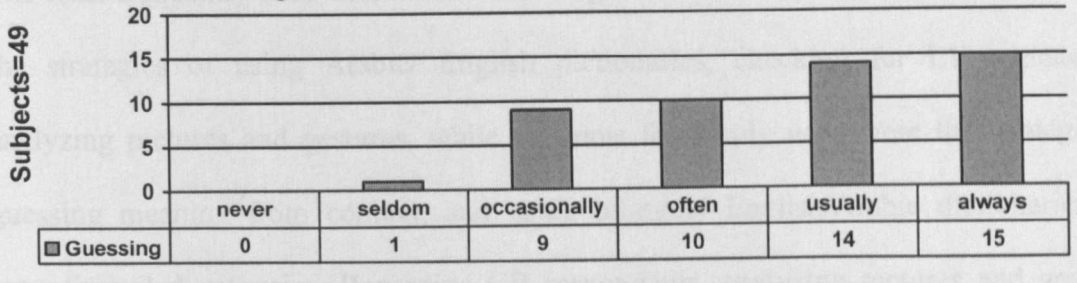


Fig. 4.3.6b: Guessing from context (Group B)



All interviewees reported a very frequent use of guessing (responses ranged from often to always). Most of student interviewees said that they depended heavily on consulting

dictionaries in order to make sure their guess is accurate even if they were satisfied with the meaning they could guess. However, guessing for some of them most often means stopping for a while thinking whether they know the word or not, then, they may decide to skip the word, but if it happened to be repeated again in the text, they consult dictionary. Even some HVK seem to focus on the word itself only and not on any contextual clues that help make good guess. One HVK student (F1) said "I analyze this word first thing I think of the meaning, then the part of speech, then if I could know the close meaning". On the other hand, some HVK do pay attention to the context where the unknown word occurs; (R1) said "When the context talks about something we have knowledge about, we can be sure about that word (meaning she knows the meaning of the word), but if we have no knowledge about the subject the guessing will be difficult". Another HVK student (B1) supports R1 ideas saying "Check what the whole meaning of the context is about; maybe it will help us understand the meaning of this word". For most of LVK students, their focus when they want to make a guess, is usually restricted on the unknown word itself, not on the context; (L3 and S3) said, *(if the guess of the unknown word fits well within the sentence, it is OK, otherwise we check dictionary).*

4.3.7. Summary of the use of Determination Strategies

The least frequently used determination strategies for GA respondents were respectively the strategies of using Arabic/ English dictionaries, checking for L1 cognate and analyzing pictures and gestures, while the most frequently used were the strategies of guessing meaning from context, and using bilingual English/Arabic dictionaries and monolingual dictionaries. Regarding GB respondents, analyzing pictures and gestures, checking for L1 cognate and breaking the word up into main parts were the least frequently used strategies, whereas using bilingual English/Arabic dictionaries and

guessing meaning from context were the most frequently used ones as can be seen in Figures 4.3.7a and 4.3,7b below.

Figure 4.3.7a: Use of determination strategies (Group A)

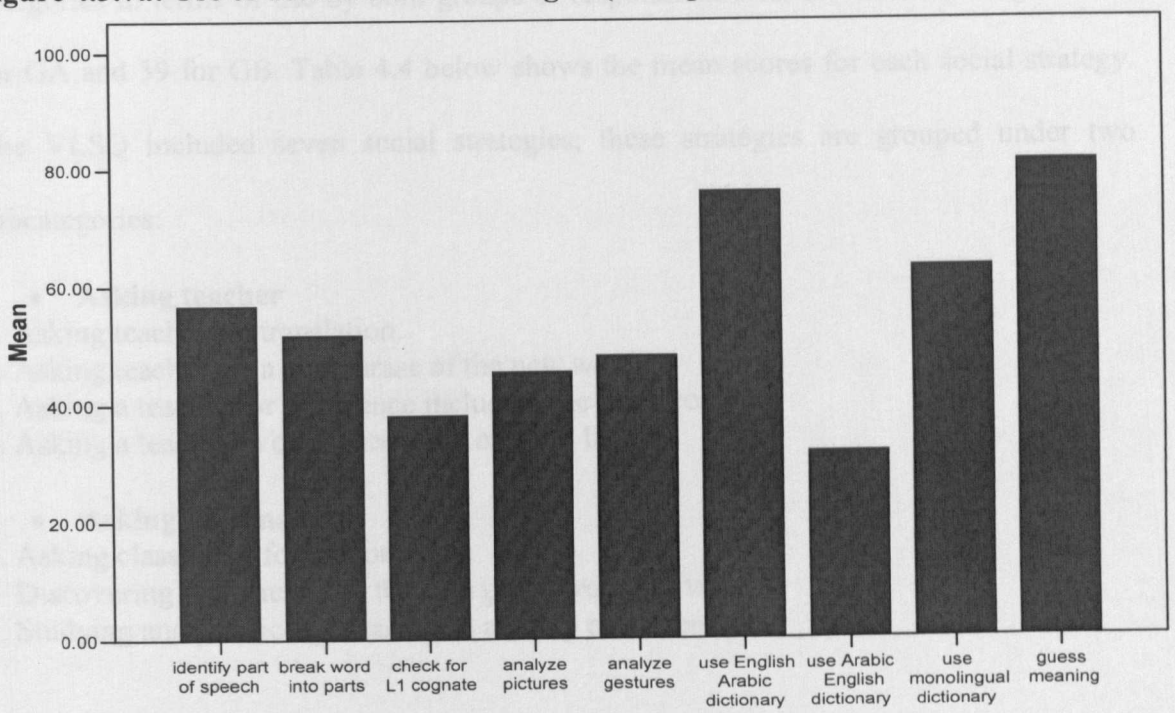
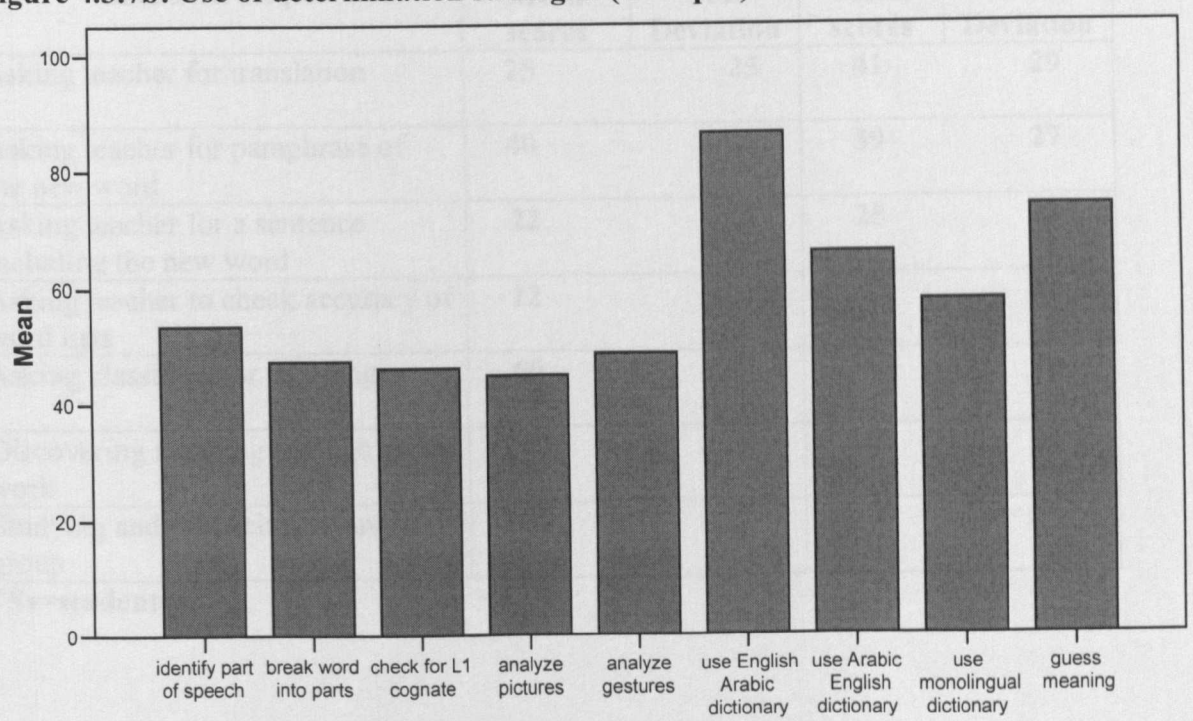


Figure 4.3.7b: Use of determination strategies (Group B)



4.4. Social Strategies

As we see in table 4.2 above the category of social strategies comes bottom of the other categories in terms of use by both groups of respondents with low score averages of 33 for GA and 39 for GB. Table 4.4 below shows the mean scores for each social strategy. The VLSQ included seven social strategies; these strategies are grouped under two subcategories:

- **Asking teacher**

1. Asking teacher for translation.
2. Asking teacher for a paraphrase of the new word.
3. Asking a teacher for a sentence including the new word.
4. Asking a teacher to check accuracy of word lists.

- **Asking classmates**

5. Asking classmates for the meaning.
6. Discovering new meanings through group work activity.
7. Studying and practicing meaning in a group of students.

Table 4.4: Use of Social Strategies

Social Strategies	Group A (Ss: 52)		Group B (Ss: 49)	
	Mean scores	Std. Deviation	Mean scores	Std. Deviation
Asking teacher for translation	25	25	41	29
Asking teacher for paraphrase of the new word	40	29	39	27
Asking teacher for a sentence including the new word	22	25	25	28
Asking teacher to check accuracy of word lists	12	23	23	31
Asking classmate for meaning	60	30	60	29
Discovering meaning through group work	44	33	52	31
Studying and practicing meaning in group	28	28	33	27

*Ss=students

4.4.1. Asking Teacher

The VLSQ included four strategies for asking teacher: (1) asking teacher for translation into Arabic, (2) asking teacher for paraphrase of the new word, (3) asking teacher for a sentence including the new word, and (4) asking teacher to check accuracy of word lists.

Asking teachers for translation is infrequently used by the respondents of GA. It received a very low mean score of 25 with 19 respondents reporting that they never used this strategy, but only three respondents reporting a very frequent use (see figure 4.4.1a below). Compared to GA respondents, GB reported more usage of this strategy with a mean score of 41. Like GA, the majority of GB respondents, i.e. 20 out of 49, reported that they had never or seldom used this strategy, whereas nine respondents reported a very frequent use of it, as illustrated below in figure 4.4.1b.

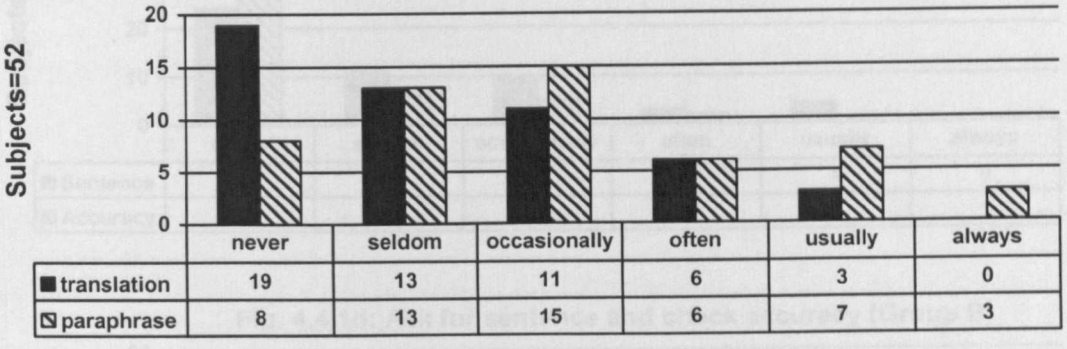
The few HVK (responses: 3 never and 2 often), MVK, (responses: 2 never, and 3 occasionally) and LVK students (responses: 1 never, 3 seldom, 1 occasionally) who used this strategy said that when they were not satisfied with the meaning of any new word after the teacher's explanation in English, they might find themselves resorting to ask for an Arabic translation. Others said that they prefer consulting dictionary over asking teachers who tended not to provide the Arabic translation, instead they would usually give a synonym, paraphrase the meaning or say 'check dictionary'.

Students can ask teachers to paraphrase the meaning in order to understand the new words they face. This strategy was used infrequently by the respondents of both groups with a mean score of 40 for GA and 39 for GB. Only a few respondents (10 GA students and 8 GB students) reported a very frequent use, while a majority of respondents (21 GA and 23

GB students) reported that they never or seldom used it. Others reported a frequent use of it as shown below in figures 4.4.1a and 4.4.1b.

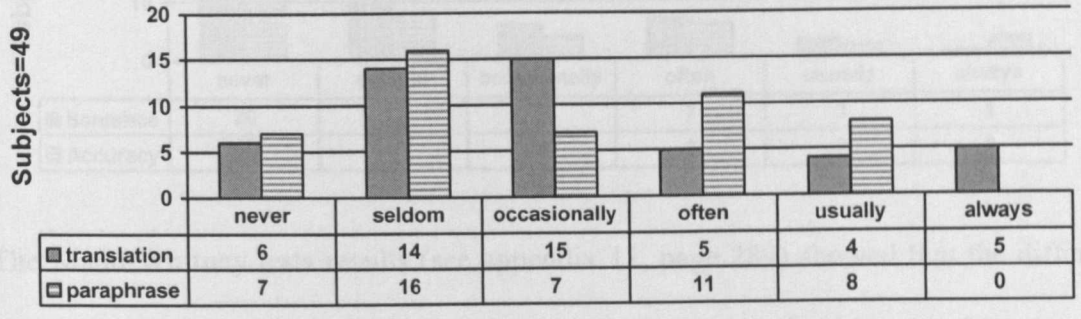
HVK (responses: 2 never, 1 seldom, 1 occasionally and 1 always) and MVK respondents (responses: 1 never, 1 seldom, 1 occasionally, 1 often, and 1 usually) who used this strategy commented that whenever they had difficulty understanding a word that seems to be important they asked for a paraphrase of the meaning in English. Regarding LVK students (responses: 1 never, 1 seldom, 2 occasionally, and 1 often) some of them said that they usually hesitated to ask; especially if they were suspicious they might be asking about a word familiar to other classmates.

Fig. 4.4.1a. Ask for translation and paraphrase (Group A)



	never	seldom	occasionally	often	usually	always
translation	19	13	11	6	3	0
paraphrase	8	13	15	6	7	3

Fig. 4.4.1b. Ask for translation and paraphrase (Group B)

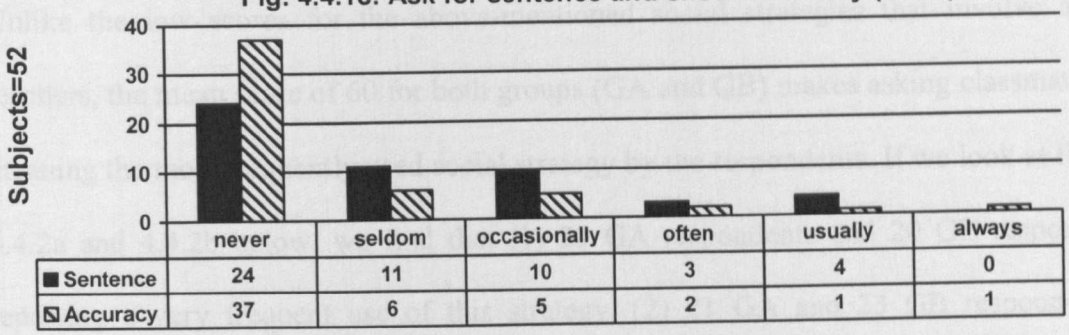


	never	seldom	occasionally	often	usually	always
translation	6	14	15	5	4	5
paraphrase	7	16	7	11	8	0

One of the least frequent strategies used by the respondents is asking the teacher for a sentence including the new word. Receiving low mean scores of 22 by GA respondents and 25 by GB respondents, this strategy was ranked as the second least frequently used of

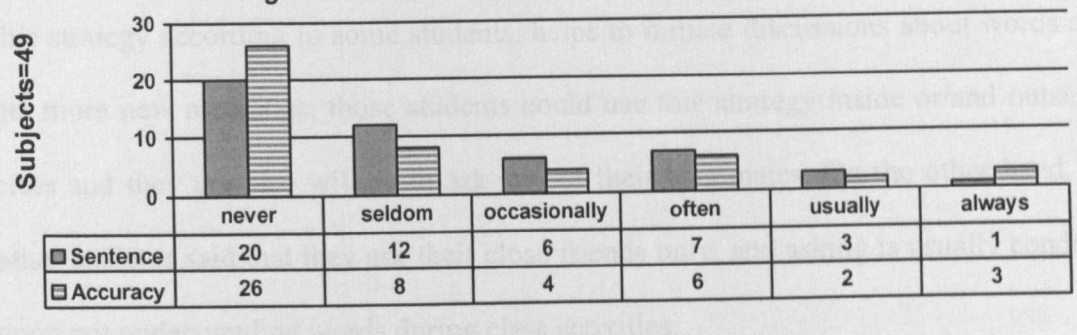
all the VLS by the two groups. 35 GA students and 32 GB students reported that they very infrequently used this strategy compared to four students from each group reporting a very frequent use of it as illustrated in figures 4.4.1c and 4.4.1d below. Most responses of the interviewees were either never or seldom. The few students reporting a frequent use of this strategy said that they usually ask teachers to put the new word in sentences when they want to know other meanings of the word. On the other hand, those who did not use this strategy said that words were usually introduced in sentences, so there was no need for asking the teacher to do so; his or her explanation is usually enough.

Fig. 4.4.1c: Ask for sentence and check accuracy (Group A)



	never	seldom	occasionally	often	usually	always
Sentence	24	11	10	3	4	0
Accuracy	37	6	5	2	1	1

Fig. 4.4.1d: Ask for sentence and check accuracy (Group B)



	never	seldom	occasionally	often	usually	always
Sentence	20	12	6	7	3	1
Accuracy	26	8	4	6	2	3

The Mann-Whitney tests results (see appendix 11, page 289) showed that the difference between the two groups in terms of using the strategy of asking teachers to check accuracy of the students' word lists was significant even though both groups reported infrequent use of it. It received a very low mean score of only 12 by GA students and 23 by GB students. 37 GA respondents reported that they had never used this strategy, whereas only two GA students reporting a very frequent use of it. On the other hand, 26

GB students reported that they had never used it compared to five GB students reporting a very frequent use of it, as shown in figure 4.4.1d above.

4.4.2. Asking Classmate

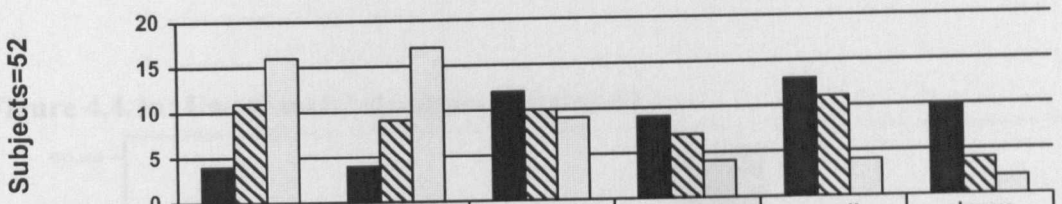
The VLSQ included three strategies for asking classmates: (1) asking classmate for meaning, (2) discovering new meanings through group work activity, and (3) studying and practising meaning in a group of students.

Unlike the low scores for the above-mentioned social strategies that involve asking teachers, the mean score of 60 for both groups (GA and GB) makes asking classmates for meaning the most frequently used social strategy by the respondents. If we look at figures 4.4.2a and 4.4.2b below, we find that (1) 23 GA respondents and 20 GB respondents reporting a very frequent use of this strategy, (2) 21 GA and 23 GB respondents a frequent use, and (3) only eight GA and six GB respondents a very infrequent use. Using this strategy according to some students, helps to initiate discussions about words and to get more new meanings; those students could use this strategy inside or/and outside the class and they are also willing to ask any of their classmates. On the other hand, some other students said that they ask their close friends only, and asking is usually conditional upon not understanding words during class activities.

Responses to the strategy of discovering new meanings through group work activity were diverse with a mean score of 44 for group A (GA) which is relatively low compared to 52 for group B (GB). As shown in figures 4.4.2a and 4.4.2b below, respondents can be divided into three groups classified in terms of strategy use: (1) 20 GA compared to 11 GB students reporting a very infrequent use, (2) 17 GA compared to 25 GB reporting a

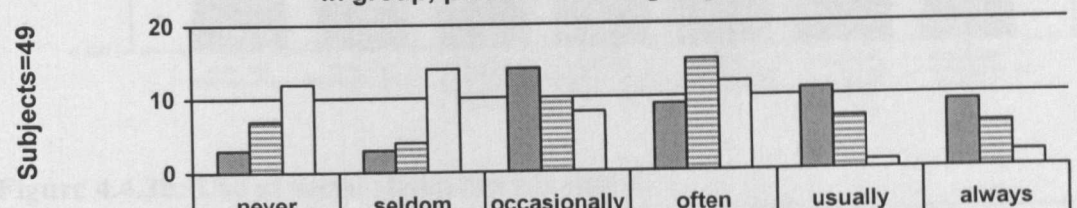
frequent use, and 15 GA compared to 13 GB students reporting a very frequent use. From students' responses we could infer that this strategy was not so commonly used among them. Some students said that they never work in groups in class; those who work in groups in class, their work is restricted to finding out the new words in reading comprehension courses and/or preparing for exams outside the class.

Fig. 4.4.2a: Ask classmate for meaning; discover meaning in group; practice meaning in group (Group A)



	never	seldom	occasionally	often	usually	always
calssmate	4	4	12	9	13	10
discover	11	9	10	7	11	4
practice	16	17	9	4	4	2

Fig. 4.4.2b: Ask classmate for meaning; discover meaning in group; practice meaning in group (Group B)



	never	seldom	occasionally	often	usually	always
classmate	3	3	14	9	11	9
discover	7	4	10	15	7	6
practice	12	14	8	12	1	2

The low mean score (28 for GA and 33 for GB) for studying and practising meaning in groups is another indicator of our respondents' unfamiliarity with group work. A quick look at figures 4.4.2a and 4.4.2b above would enable us to realize that a majority of respondents, i.e. 33 GA students and 26 GB students reported that they either never or seldom used this strategy. In contrast, only six GA and three GB respondents reported a very frequent use. Some HVK students said that when they study in groups, they tend to exchange information including vocabulary they have recently learned, while others said

that they never used it.

4.4.3. Summary of the Use of Social Strategies

The social strategies are the least frequently used by both groups of respondents. Only one out of seven strategies received a mean score of above 50 by GA and so did two strategies by GB as shown in figures 4.4.3a and 4.4.3b below.

Figure 4.4.3a: Use of social strategies (Group A)

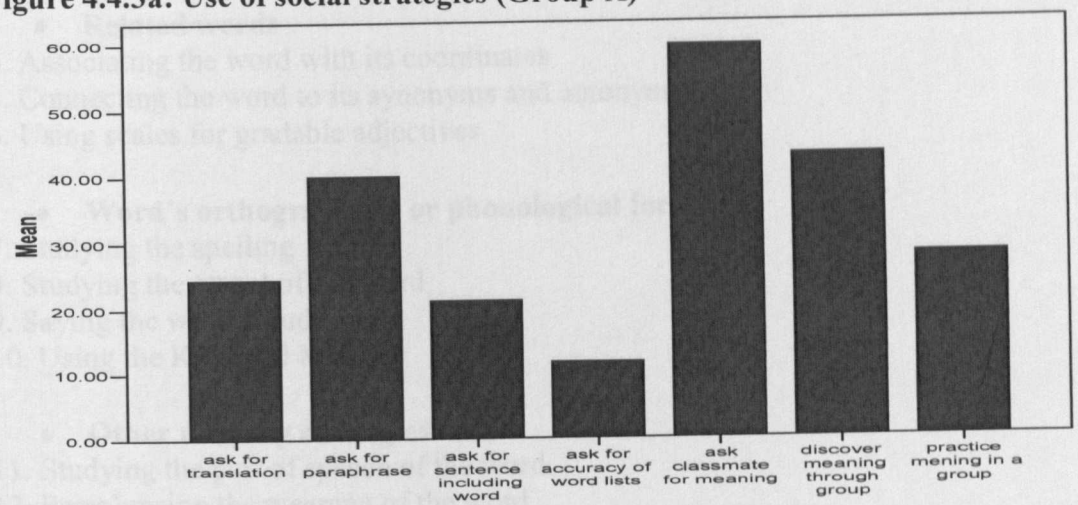
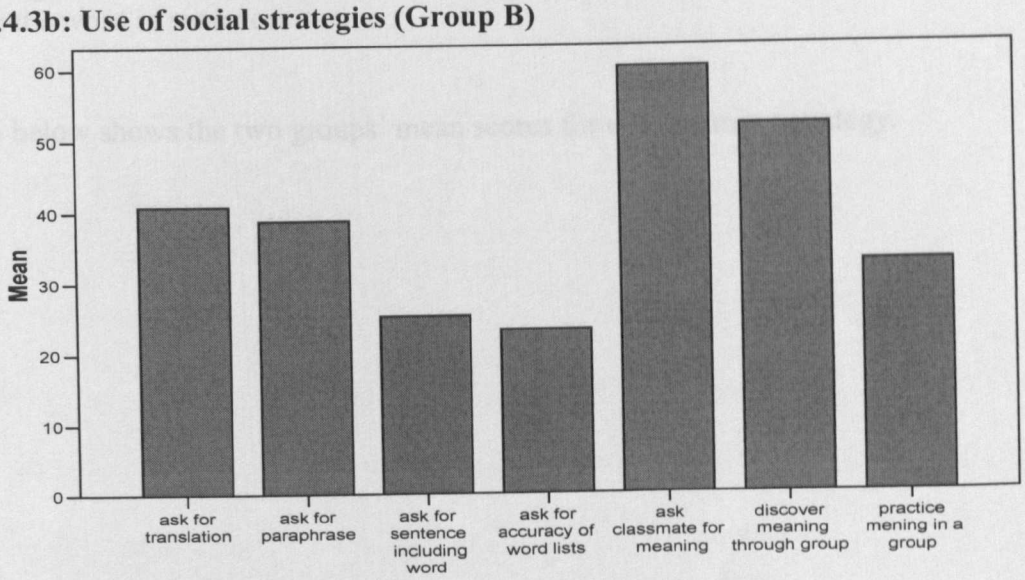


Figure 4.4.3b: Use of social strategies (Group B)



4.5. Memory Strategies

As we see in table 4.2 above, the category of memory strategies received a moderate average score of 47 from group A (GA) respondents and 52 from group B (GB) respondents. The VLSQ included fourteen strategies for the category of memory strategies, grouped into four subcategories:

- **Pictures/Imagery**

1. Making a picture of the word's meaning.
2. Connecting the new word to a personal experience.
3. Making an image of the form of the word.

- **Related words**

4. Associating the word with its coordinates
5. Connecting the word to its synonyms and antonyms
6. Using scales for gradable adjectives

- **Word's orthographical or phonological form**

7. Studying the spelling
9. Studying the sound of the word
9. Saying the word aloud
10. Using the Keyword Method

- **Other memory strategies**

11. Studying the part of speech of the word
12. Paraphrasing the meaning of the word
13. Learning the words of an idiom together
14. Using the word in sentences

Table 4.5 below shows the two groups' mean scores for each memory strategy.

Table 4.5: Use of Memory Strategies

Memory Strategies	Group A (Ss: 52)		Group B (Ss: 49)	
	Mean scores	Std. Deviation	Mean scores	Std. Deviation
Make picture of the meaning of the word	49	31	56	31
Study spelling	57	33	65	28
Study part of speech	54	30	54	28
Connect to personal experience	62	31	62	32
Paraphrase the meaning of the word	55	34	54	29
Study the sound of the word	55	32	65	32
Associate word with its coordinates	35	31	41	31
Say the word aloud	59	35	62	32
Connect word to synonyms and antonyms	49	27	50	27
Learn words of an idiom together	46	30	51	27
Make image of the form of the word	45	31	45	30
Use scales for gradable adjectives	27	30	39	28
Use Keyword Method	22	31	34	32
Use the word in sentences	49	31	52	34

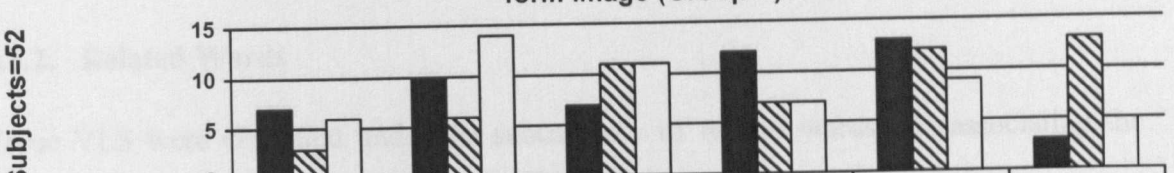
***Ss=Students**

4.5.1. Pictures/imagery

The VLSQ included three strategies for pictures/imagery: (1) making a picture of the meaning of the word, (2) connecting the new word to personal experience, and (3) making an image of the form of the word.

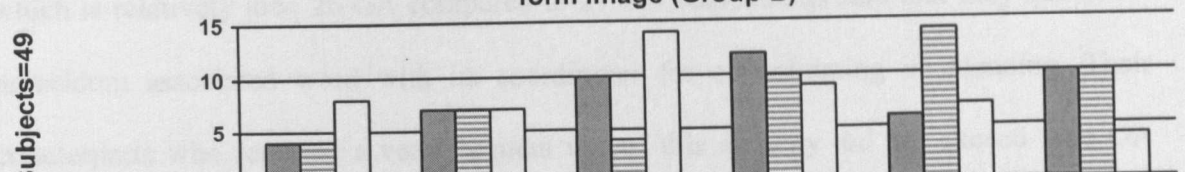
There are no significant differences between group A (GA) and group B (GB) respondents in terms of using these three above mentioned strategies, see appendix 11. Figures 4.5.1a and 4.5.1b below provide row data about both groups' responses.

Fig. 4.5.1a: make meaning picture; connect to experience; make form image (Group A)



	never	seldom	occasionally	often	usually	always
meaning picture	7	10	7	12	13	3
experience	3	6	11	7	12	13
form image	6	14	11	7	9	5

Fig. 4.5.1b: make meaning picture; connect to experience; make form image (Group B)



	never	seldom	occasionally	often	usually	always
meaning picture	4	7	10	12	6	10
experience	4	7	4	10	14	10
form image	8	7	14	9	7	4

Receiving a mean score of 49 from GA and 56 from GB respondents, the use of the first strategy can be considered as fairly frequent, compared with the other strategies of this category. 16 respondents from each group reported a very frequent use of this strategy while 17 GA and 11 GB respondents reported a very infrequent use of it. The second strategy was found to be quite frequently used by the respondents with a mean score of 62 for both groups. 25 out of 52 GA respondents and 24 out of 49 GB respondents reported that they had either usually or always used this strategy, whereas only nine GA and 11 GB respondents reported infrequent use. The third strategy was the least used one in this subcategory since it received a mean score of 45 by both groups. 20 GA respondents and

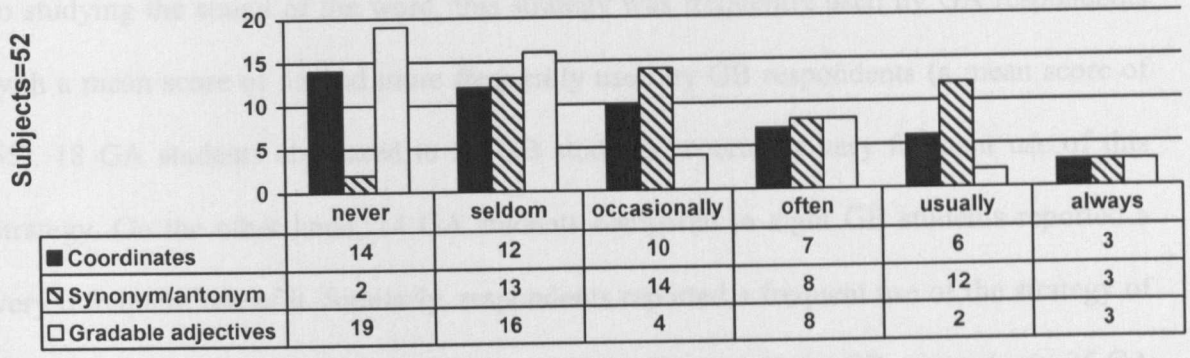
15 GB respondents reported that they had never or seldom made images of the form of the word to remember it. On the other hand, 14 GA and 11 GB respondents reported a very frequent use of this strategy.

4.5.2. Related Words

Three VLS were classified under the subcategory of related words: (1) associating the word with its coordinates, (2) connecting the word to its synonyms and antonyms and (3) using scales for gradable adjectives.

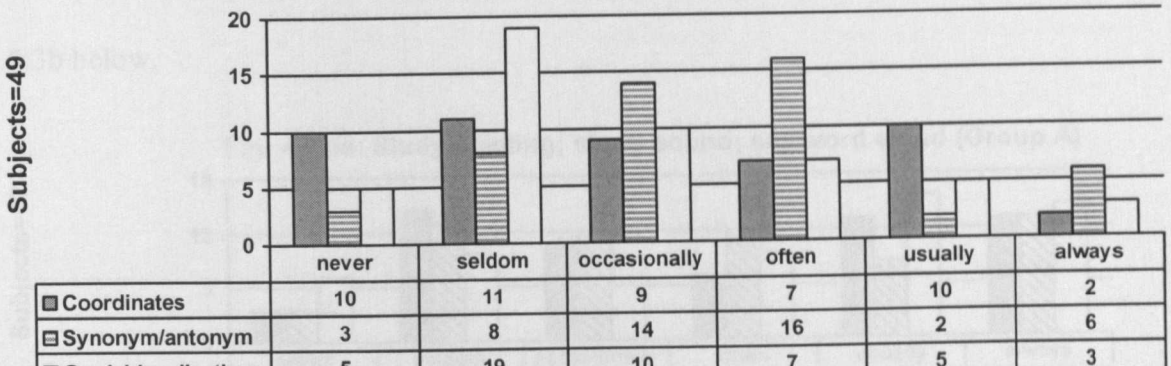
The first strategy received a mean score of 35 from GA and 41 from GB respondents which is relatively low. 26 GA compared to 21 GB respondents said that they had never or seldom associated word with its coordinates for consolidating its meaning. Their counterparts who reported a very frequent use of this strategy did not exceed nine GA respondents and 12 GB respondents. Connecting of word to its synonyms and antonyms was a relatively frequent strategy in terms of use by the two groups of respondents with a mean score of 49 for GA and 50 for GB respondents. 15 GA and 11 GB students reported that they had either never or seldom used it, compared to 15 GA and eight GB students reporting a very frequent use, and a majority, i.e. 22 GA and 30 GB students a frequent use. The third strategy received a mean score of 27 from GA and 39 from GB respondents, which makes it the lowest but one in terms of use by both groups. The Mann-Whitney test results (see appendix 11, page 289) showed that the difference between the two groups was significant even though both groups reported infrequent use of this strategy. While 26 GA and 24 GB respondents reported a very infrequent use of it, only five GA and eight GB respondents reported a very frequent use as illustrated in figures 4.5.2a and 4.5.2b below.

Fig. 4.5.2a: Associating word with coordinates; connecting to synonym and antonym; using gradable adjectives (Group A)



	never	seldom	occasionally	often	usually	always
Coordinates	14	12	10	7	6	3
Synonym/antonym	2	13	14	8	12	3
Gradable adjectives	19	16	4	8	2	3

Fig. 4.5.2b: Associating word with coordinates; connecting to synonym and antonym; using gradable adjectives (Group B)



	never	seldom	occasionally	often	usually	always
Coordinates	10	11	9	7	10	2
Synonym/antonym	3	8	14	16	2	6
Gradable adjectives	5	19	10	7	5	3

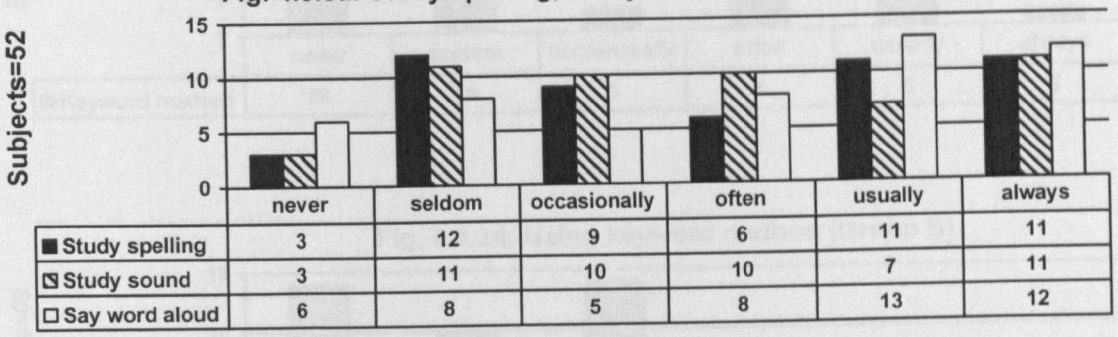
4.5.3. Word's Orthographical or Phonological Form

The VLSQ included four strategies for the word's orthographical or phonological form: (1) studying the spelling, (2) studying the sound of the word, (3) saying the word aloud, and (4) using the Keyword Method.

The first three strategies were found to be frequently used by the respondents. Studying spelling received a mean score of 57 from GA and 65 from GB respondents. A majority of respondents (22 GA and 23 GB) reported a very frequent use of this strategy, while 15 GA and only eight GB respondents said that they had either never or seldom used it. Some of those who used this strategy said that they learned the spelling by frequently

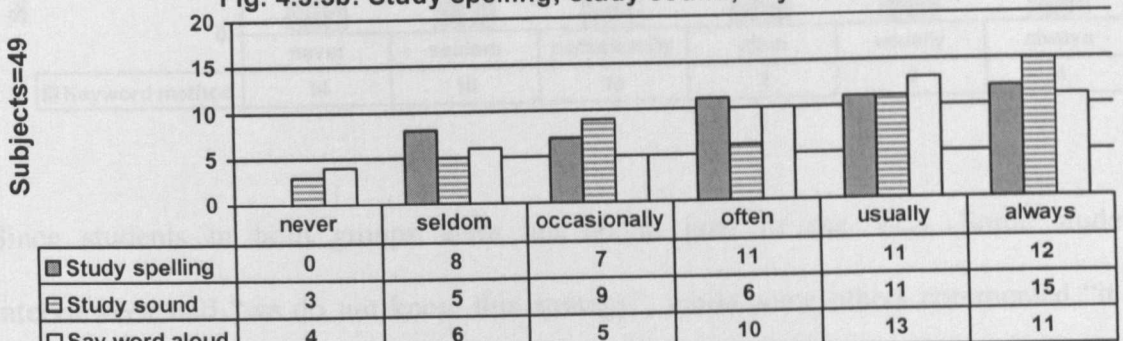
writing the new words down, with specific concentration on the long words. With regard to studying the sound of the word, this strategy was frequently used by GA respondents with a mean score of 55 and more frequently used by GB respondents (a mean score of 65). 18 GA students compared to 26 GB students reported a very frequent use of this strategy. On the other hand, 14 GA students compared to eight GB students reported a very infrequent use of it. Similarly, respondents reported a frequent use of the strategy of saying the word aloud with a mean score of 59 for GA and 62 for GB respondents. 25 GA and 24 GB respondents reported a very frequent use of this strategy; while 14 GA and 10 GB respondents reported that they either never or seldom used it, see figures 4.5.3a and 4.5.3b below.

Fig. 4.5.3a: Study spelling; study sound; say word aloud (Group A)



	never	seldom	occasionally	often	usually	always
Study spelling	3	12	9	6	11	11
Study sound	3	11	10	10	7	11
Say word aloud	6	8	5	8	13	12

Fig. 4.5.3b: Study spelling; study sound; say word aloud (Group B)



	never	seldom	occasionally	often	usually	always
Study spelling	0	8	7	11	11	12
Study sound	3	5	9	6	11	15
Say word aloud	4	6	5	10	13	11

On the other hand, the strategy of the keyword method was infrequently used by the respondents, especially by GA respondents. The Mann-Whitney tests results (see appendix 11, page 289) showed that the difference between the two groups was

significant even though both groups reported infrequent use of the Keyword method. It received a low mean score of 22 from GA and 34 from GB respondents which makes it the most infrequently used strategy for both groups compared to other memory strategies. While 28 GA respondents said that they had never used it, only seven respondents reported a very frequent use of it as shown in figure 4.5.3c. As for GB students, 14 out of 49 reported that they had never used it compared to four students who reported that they had always used it as illustrated in figure 4.5.3d below.

Fig. 4.5.3c: Using keyword method (Group A)

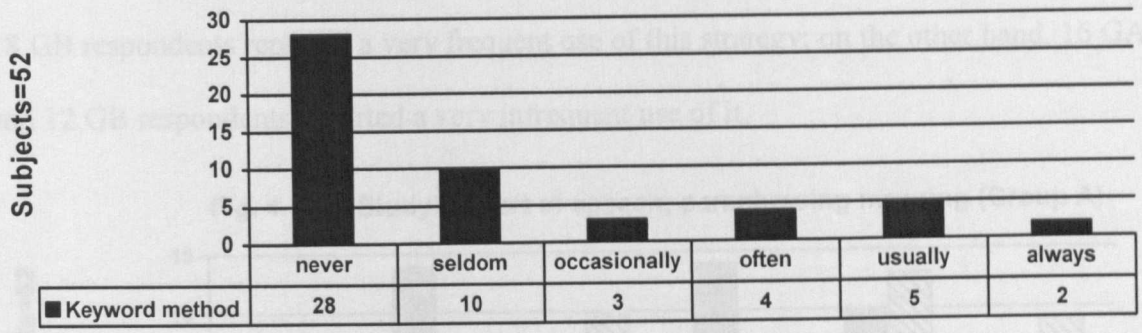
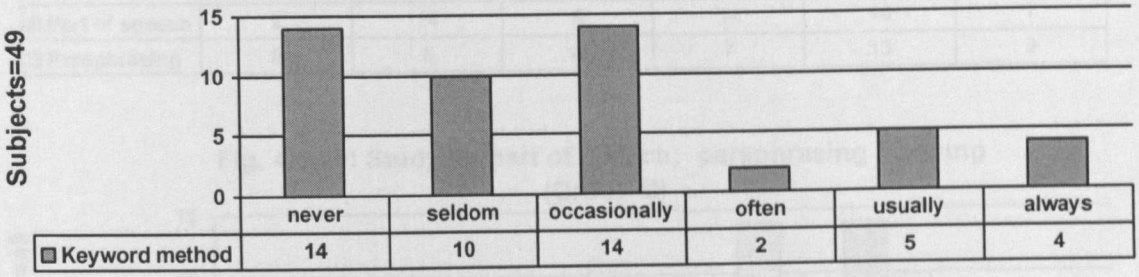


Fig. 4.5.3d: Using keyword method (Group B)



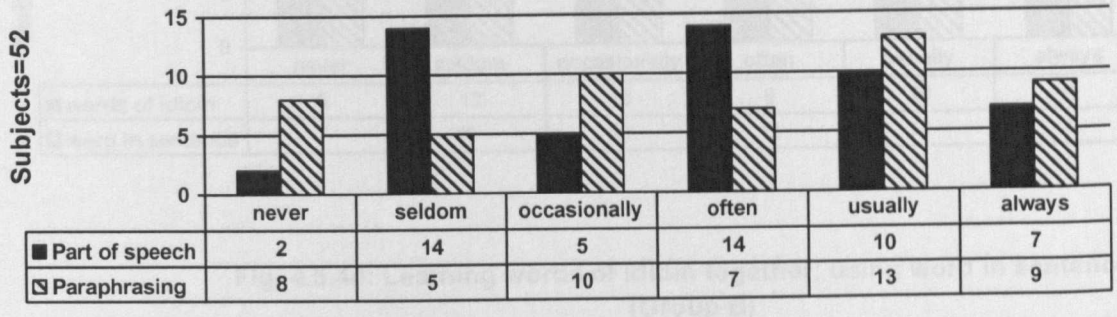
Since students in both groups were not taught how to use VLS. Some student interviewees said "we do not know this strategy", while some others commented "it is complicated and difficult". In assuring its difficulty, one student said "linking one Arabic word with the new English word involves remembering both words to reach the meaning which is difficult".

4.5.4. Other Memory Strategies

The VLSQ included four strategies for the other memory strategies: (1) studying the part of speech of the word, (2) paraphrasing the meaning of the word, (3) learning the words of an idiom together, and (4) using the word in sentences.

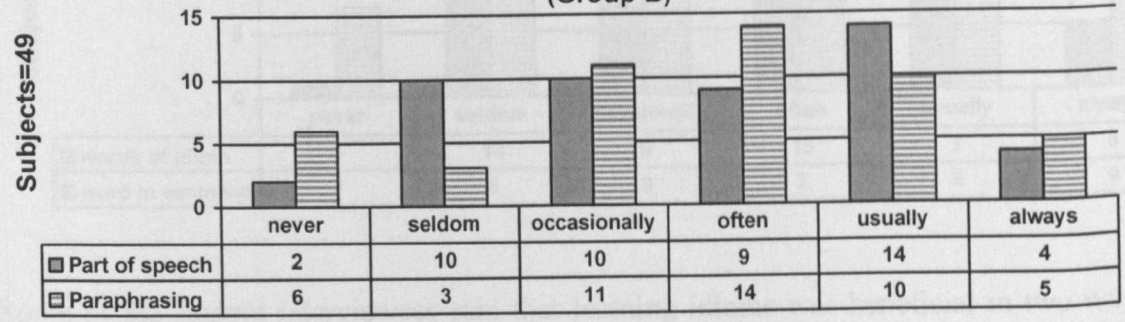
Compared to the last two strategies, the first ones were found to be more frequently used by the respondents. With a mean score of 54 for both groups, studying the part of speech of the word was found to be frequently used by the respondents. 17 GA respondents and 18 GB respondents reported a very frequent use of this strategy; on the other hand, 16 GA and 12 GB respondents reported a very infrequent use of it.

Fig. 4.5.4a: Studying part of speech; paraphrasing meaning (Group A)



	never	seldom	occasionally	often	usually	always
Part of speech	2	14	5	14	10	7
Paraphrasing	8	5	10	7	13	9

Fig. 4.5.4b: Studying part of speech; paraphrasing meaning (Group B)



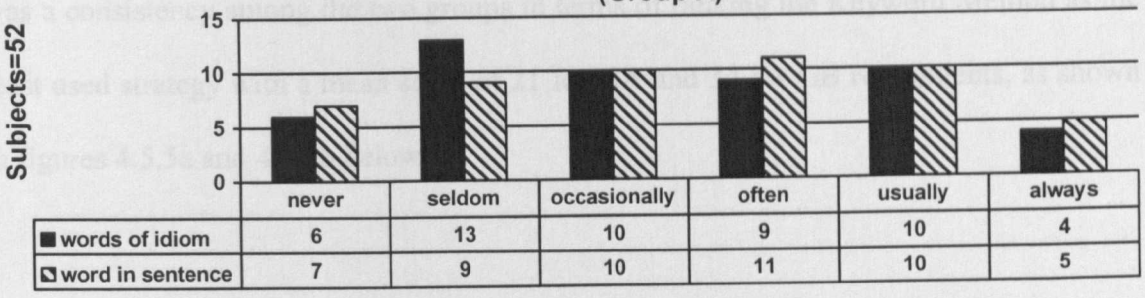
	never	seldom	occasionally	often	usually	always
Part of speech	2	10	10	9	14	4
Paraphrasing	6	3	11	14	10	5

Similarly, the strategy of paraphrasing the word's meaning was frequently used by the respondents with a mean score of 55 for GA and 54 for GB respondents. 22 GA respondents reported a very frequent use of paraphrasing the meaning compared to 15 GB

who did so, whereas 13 GA and nine GB respondents reported infrequent use of it, as shown in figures 4.5.4a and 4.5.4b above.

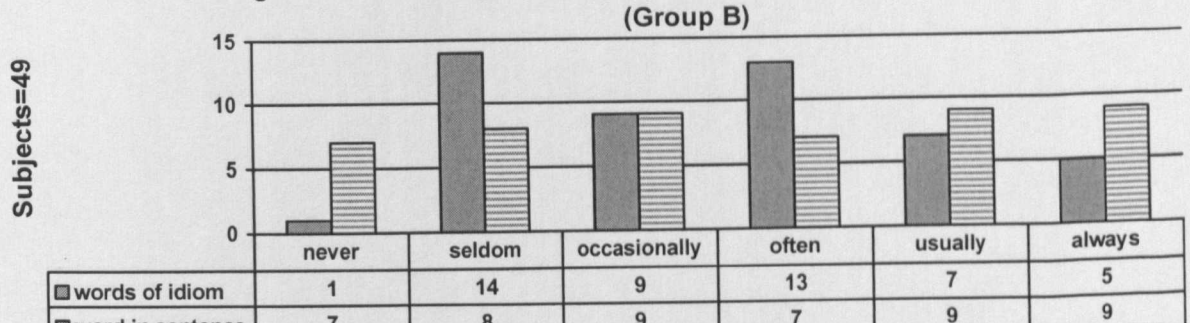
The two strategies of learning words of an idiom together and using the word in sentences were found to be of moderate use by the respondents. The former strategy obtained a mean score of 46 from GA and 51 from GB respondents, with 14 GA and 12 GB respondents reporting a very frequent use, while a majority (19 GA and 22 GB) reported frequent use, see figures 4.5.4c and 4.5.4d below.

Fig. 4.5.4c: Learning words of idiom together; using word in sentences (Group A)



	never	seldom	occasionally	often	usually	always
words of idiom	6	13	10	9	10	4
word in sentence	7	9	10	11	10	5

Fig. 4.5.4d: Learning words of idiom together; using word in sentences (Group B)



	never	seldom	occasionally	often	usually	always
words of idiom	1	14	9	13	7	5
word in sentence	7	8	9	7	9	9

Some of the student interviewees said that learning idioms was beneficial in two ways: first, they would use proverbs in communication, and second, they would analyze the words of proverbs to be used in other sentences. The latter strategy, similarly, received a moderate mean score of 49 from GA and 52 from GB respondents, with 15 GA and 18 GB reporting a very frequent use of it, whereas 16 GA and 15 GB respondents reported a

very infrequent use. Students said that this strategy helped them to consolidate the word's part of speech as well as the word's meaning.

4.5.5. Summary of the Use of Memory Strategies

With a score average of 47 for GA respondents and 52 for GB respondents, the use of memory strategies was not so frequent. For GA respondents, the most frequently used strategy of this category was the strategy of connecting to personal experience with a mean score of 62, whereas the strategy of studying the sound of the word was the most frequently used one by GB respondents with a mean score of 65. On the other hand, there was a consistency among the two groups in terms of ranking the Keyword Method as the least used strategy with a mean score of 21 for GA and 34 for GB respondents, as shown in figures 4.5.5a and 4.5.5b below.

Figure 4.5.5a: Use of memory strategies (Group A)

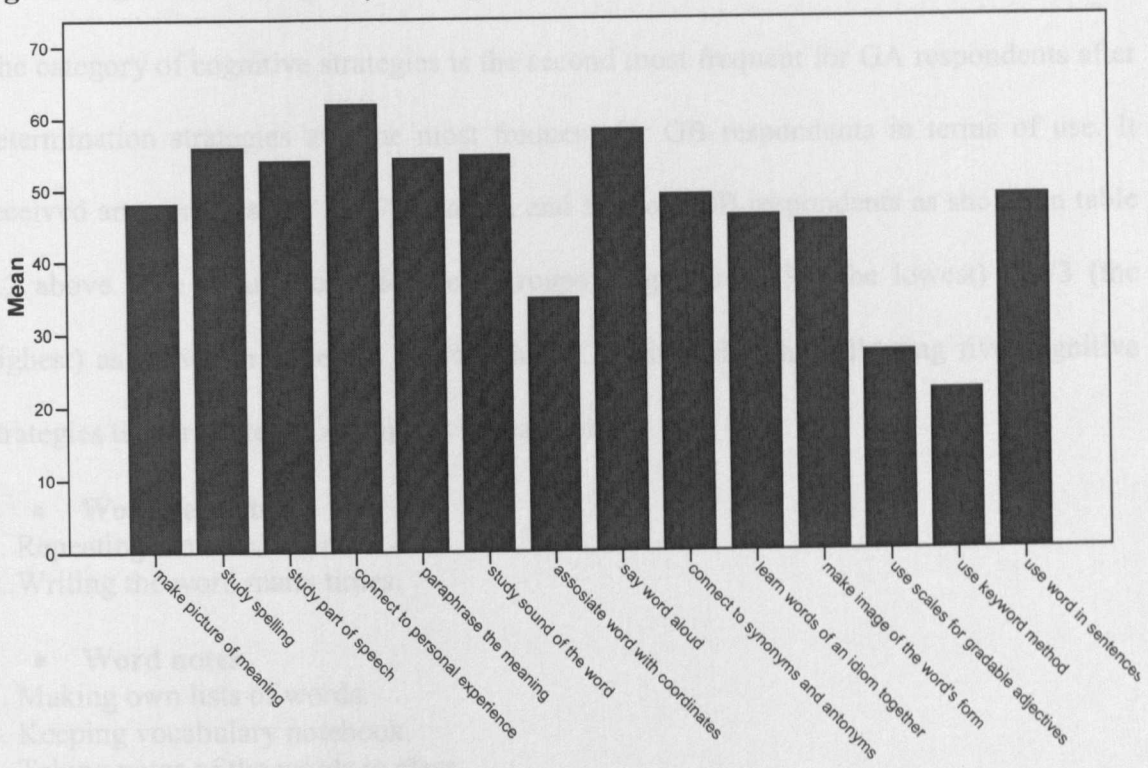
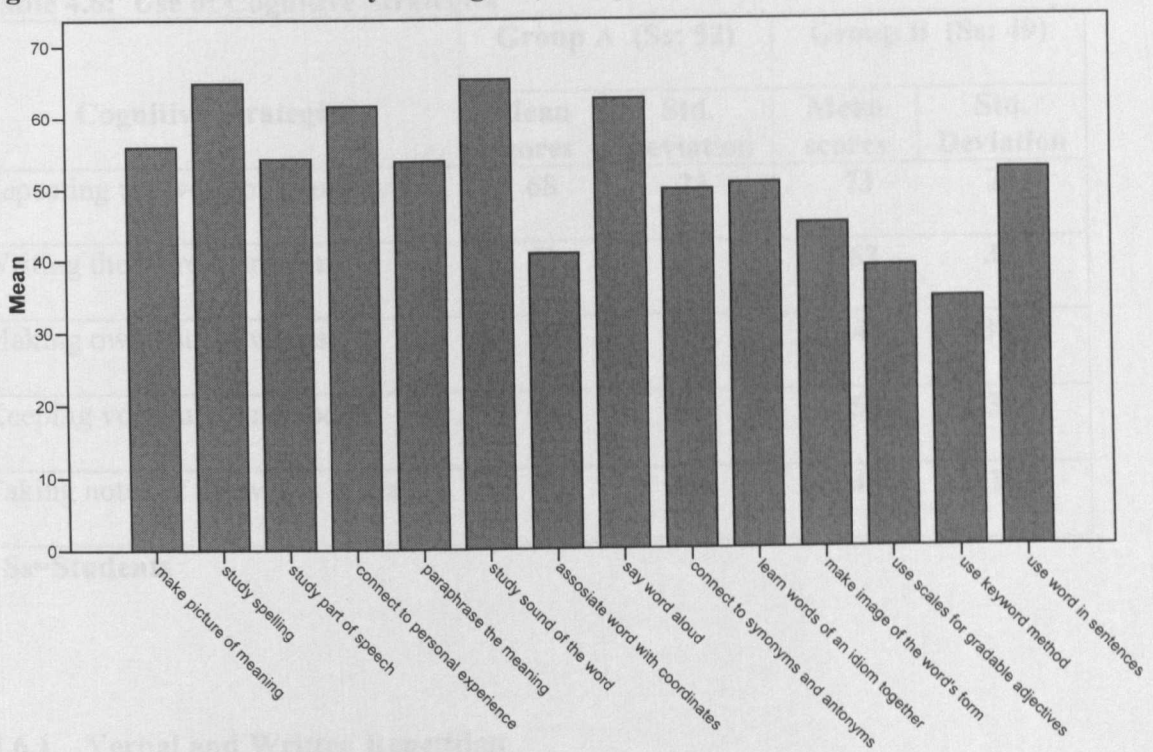


Figure 4.5.5b: Use of memory strategies (Group B)



4.6. Cognitive Strategies

The category of cognitive strategies is the second most frequent for GA respondents after determination strategies and the most frequent for GB respondents in terms of use. It received an average score of 47 from GA and 58 from GB respondents as shown in table 4.2 above. The mean scores for both groups ranged from 34 (the lowest) to 73 (the highest) as shown in table 4.6 below. The VLSQ included the following five cognitive strategies that are categorized in two subcategories:

- **Word repetition**

1. Repeating the word over and over.
2. Writing the word many times.

- **Word notes**

3. Making own lists of words.
4. Keeping vocabulary notebook.
5. Taking notes of the words in class.

Table 4.6: Use of Cognitive Strategies

Cognitive Strategies	Group A (Ss: 52)		Group B (Ss: 49)	
	Mean scores	Std. Deviation	Mean scores	Std. Deviation
Repeating the word over and over	68	25	73	29
Writing the word many times	59	32	62	33
Making own lists of words	39	29	49	32
Keeping vocabulary notebook	34	33	56	37
Taking notes of the words in class	37	28	49	35

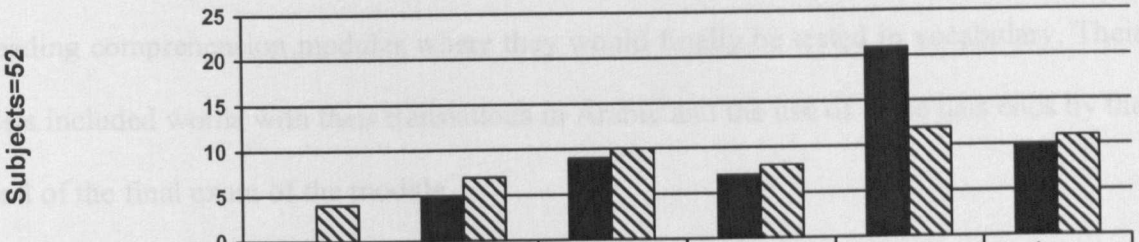
*Ss=Students

4.6.1. Verbal and Written Repetition

The VLSQ included two cognitive strategies for verbal and written repetition: (1) repeating the word over and over and (2) writing the word many times. The first strategy

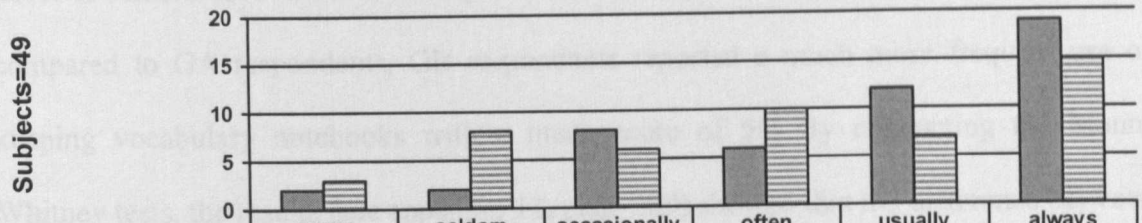
was found to be one of the most frequently used of all strategies by both groups of the respondents with a fairly high mean score of 68 for GA and 73 for GB respondents. A majority of students, i.e. 31 respondents from each group reported a very frequent use of this strategy. Only five GA and four GB respondents, on the other hand, reported a very infrequent use. Interviewees said that repeating the word over and over was helpful for learning correct pronunciation. Similarly, the second strategy was also quite frequently used by the respondents. This strategy received a mean score of 59 from GA and 62 from GB respondents. While 23 out of 52 GA respondents and 22 out of 49 GB respondents reported a very frequent use of writing the word many times, only 11 GA and 11 GB respondents said that they had either never or seldom used it as illustrated in figures 4.6.1a and 4.6.1b below.

Fig. 4.6.1a: Verbal and written repetition (Group A)



	never	seldom	occasionally	often	usually	always
Verbal repetition	0	5	9	7	21	10
Written repetition	4	7	10	8	12	11

Fig. 4.6.1b: Verbal and written repetition (Group B)



	never	seldom	occasionally	often	usually	always
Verbal repetition	2	2	8	6	12	19
Written repetition	3	8	6	10	7	15

4.6.2. Word Notes

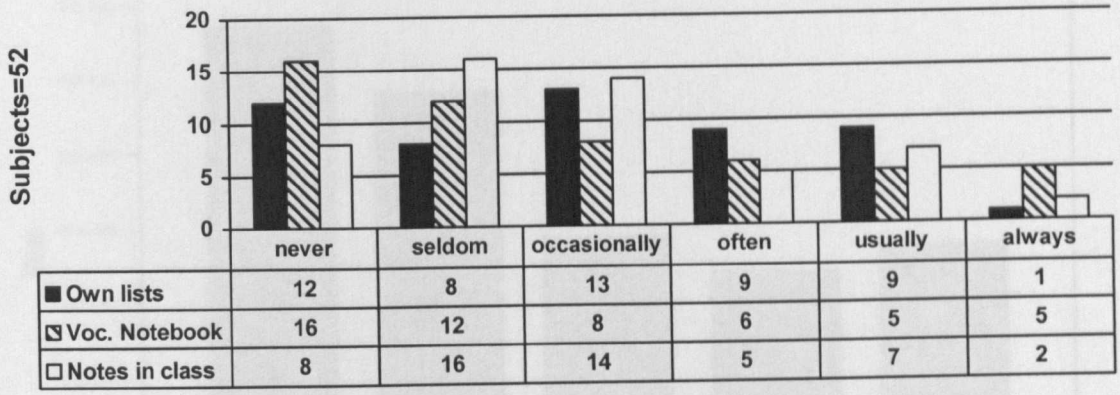
The VLSQ included three cognitive strategies for word notes: (1) making own lists of words, (2) keeping vocabulary notebook. And (3) taking notes of the words in class.

Generally speaking, compared to GB respondents, these three strategies were less frequently used by GA respondents. Making own lists of words received a mean score of 39 from GA respondents with 20 respondents reported that they either never or seldom used this strategy, whereas only 10 respondents reported a very frequent use of it. On the other hand, this strategy is more frequently used by GB respondents with a mean score of 49. GB respondents can be divided into three equal groups in terms of use: 13 a very frequent use; 19 a frequent use; and 17 a very infrequent use, see figures 4.6.2a and 4.6.2b below. Generally, students sometimes used word lists for some modules, especially reading comprehension modules where they would finally be tested in vocabulary. Their lists included words with their translations in Arabic and the use of those lists ends by the end of the final exam of the module.

Keeping a vocabulary notebook was the least frequently used cognitive strategy for GA respondents with a mean score of 34. 28 out of 52 respondents reported that they had never or seldom used it, while 10 respondents reported a very frequent use of it. However, compared to GA respondents, GB respondents reported a much more frequent use of keeping vocabulary notebooks with a mean score of 56. By conducting the Mann-Whitney tests, the results (see appendix 11, page 289) showed that the difference between the two groups was significant. A majority of GB respondents (25) reported a very frequent use of this strategy compared to 15 respondents reporting a very infrequent use of it as shown in figures 4.6.2a and 4.6.2b below. The interview data illustrated that only

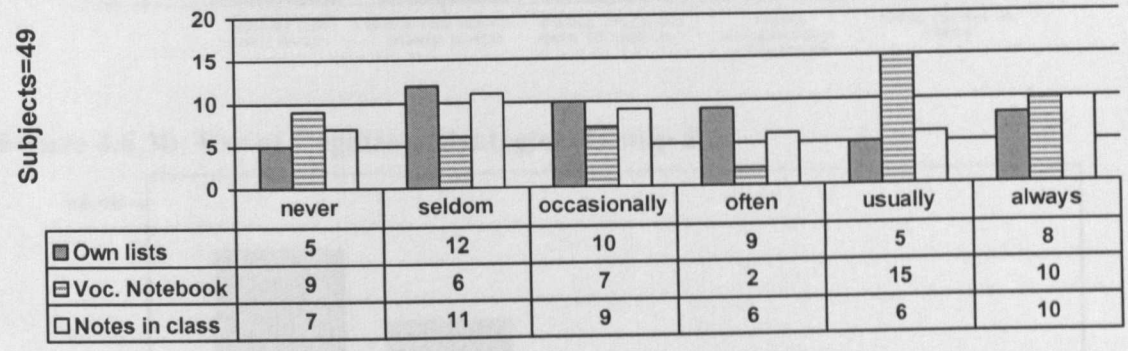
one HVK (M1), one MVK (W2) and two LVK students (A3 and M3) reported keeping vocabulary notes including every new word facing them inside or/and outside the class. The MVK and LVK students' notes included only the meaning of the word in Arabic, while the HVK student's notes included meaning, part of speech, pronunciation taken from dictionaries, and sometimes a sentence including the word.

Fig. 4.6.2a: Making own lists; keeping notebook; taking notes (Group A)



	never	seldom	occasionally	often	usually	always
Own lists	12	8	13	9	9	1
Voc. Notebook	16	12	8	6	5	5
Notes in class	8	16	14	5	7	2

Fig. 4.6.2b: Making own lists; keeping notebook; taking notes (Group B)



	never	seldom	occasionally	often	usually	always
Own lists	5	12	10	9	5	8
Voc. Notebook	9	6	7	2	15	10
Notes in class	7	11	9	6	6	10

Regarding the strategy of taking notes of the words in class, the two groups show differences in terms of use of this strategy as well. It received a low mean score of 37 from GA, but a higher score (49) from GB respondents. While 24 GA and 18 GB respondents reported a very infrequent use of this strategy, nine GA and 16 GB reported a very frequent use, see figures 4.6.2a and 4.6.2b above. Most of the students who used this strategy said that they used their modules books or notebooks' margins for taking notes. Some of them used to transfer what they had written into their notebooks.

4.6.3. Summary of the Use of Cognitive Strategies

There is a consistency between GA and GB respondents in that the two groups placed the strategies of verbal and written repetition at the top in terms of use regardless of the differences in sheer mean scores. Figures 4.6.3a and 4.3.3b below show the use of cognitive strategies by both groups.

Figure 4.6.3a: Use of Cognitive Strategies (Group A)

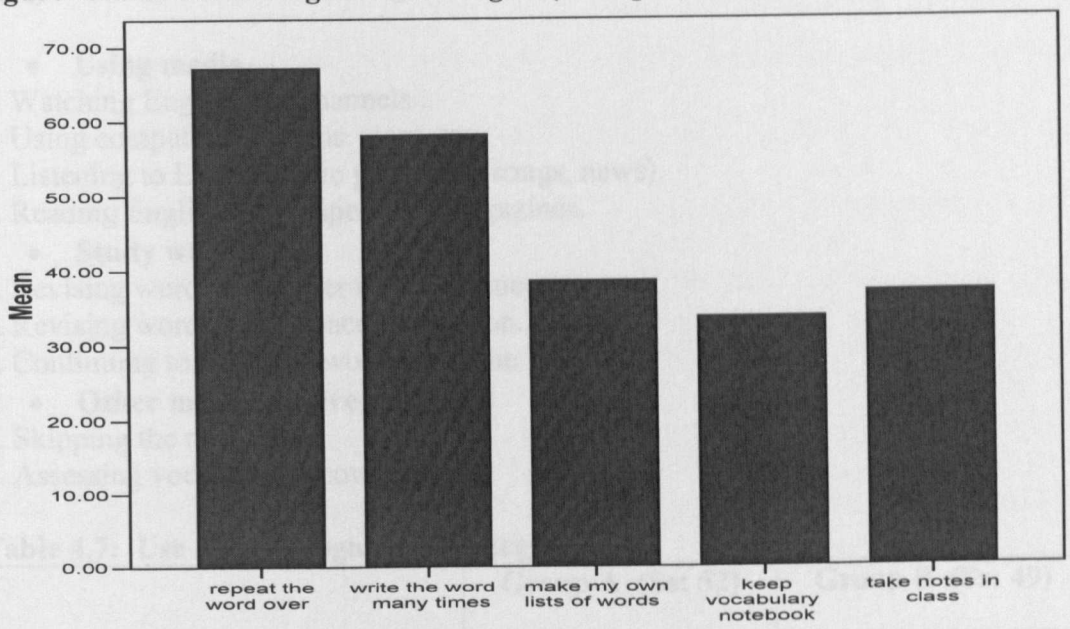
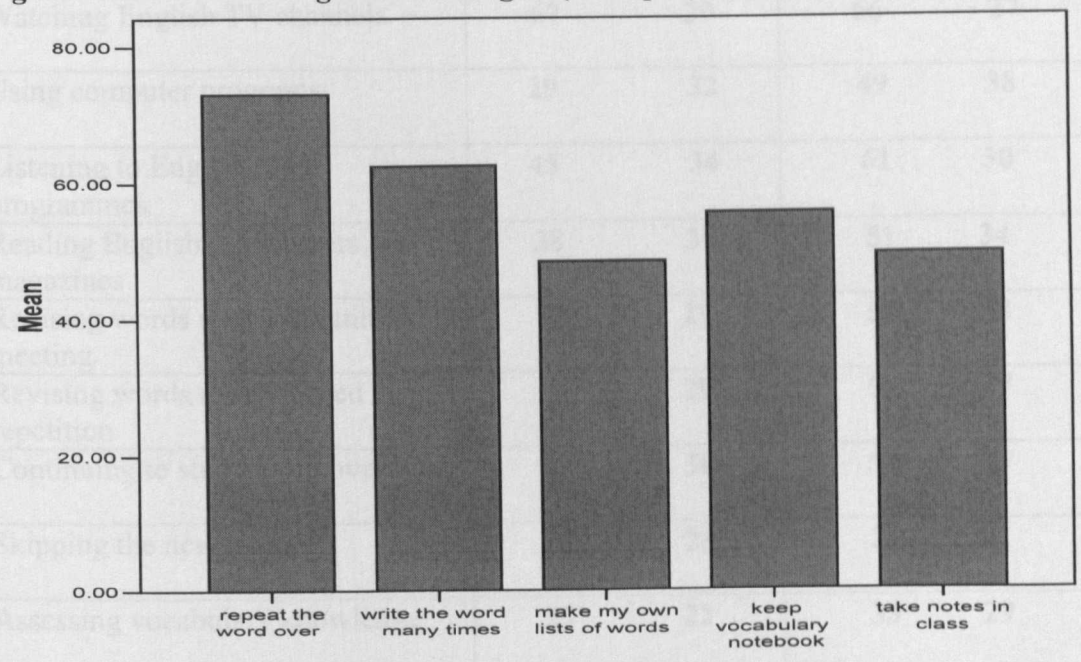


Figure 4.6.3b: Use of Cognitive Strategies (Group B)



4.7. Metacognitive Strategies

The category of metacognitive strategies comes bottom but one in terms of use by the two groups of respondents. It received a fairly low mean score average of 41 from GA and a moderate score average of 51 from GB respondents. Table 4.7 below shows the mean scores for each metacognitive strategy. The VLSQ included nine metacognitive strategies categorised under three sub-categories as follows:

- **Using media**

1. Watching English TV channels .
2. Using computer programs.
3. Listening to English radio programs (songs, news).
4. Reading English newspapers and magazines.

- **Study word**

5. Revising words soon after the initial meeting.
6. Revising words using spaced repetition.
7. Continuing to study the word over time.

- **Other metacognitive strategies**

8. Skipping the new word.
9. Assessing vocabulary knowledge.

Table 4.7: Use of Metacognitive Strategies

Metacognitive Strategies	Group A (Ss: 52)		Group B (Ss: 49)	
	Mean scores	Std. Deviation	Mean scores	Std. Deviation
Watching English TV channels	67	29	66	27
Using computer programs	29	32	49	38
Listening to English radio programmes	45	34	61	30
Reading English newspapers and magazines	38	30	51	34
Revising words soon after initial meeting	52	29	58	28
Revising words using spaced repetition	41	29	54	27
Continuing to study word over time	43	30	55	29
Skipping the new word	26	28	28	31
Assessing vocabulary knowledge	22	22	33	29

*Ss=Students

4.7.1. Using Media

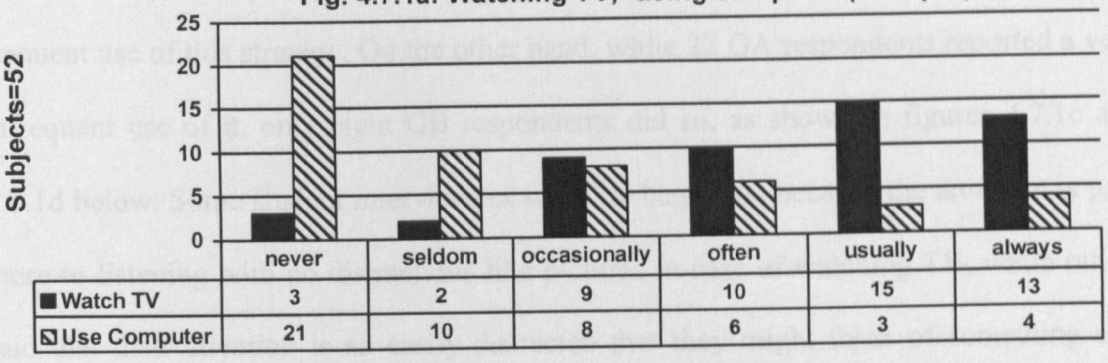
The VLSQ included four strategies for using media: (1) watching English TV channels, (2) using computer programs, (3) listening to English radio programmes, and (4) reading English newspapers and magazines.

Watching English TV channels was found to be the most frequently used strategy of this category by the two groups of respondents; it was the third most frequent strategy of all the strategies used by the respondents with a mean score of 67 for GA and 66 for GB respondents. 28 out of 52 GA respondents and 24 out of 49 GB respondents reported a very frequent use of this strategy; while only five GA and four GB respondents reported a very infrequent use of it, see figures 4.7.1a and 4.7.1b below.

Most interviewee students stated that they frequently used this strategy in their spare time, especially during their summer holiday. They watched news in English as well as English movies for both pleasure and learning. With respect to news, they usually watch the BBC World, as for the English movies, they watch them mostly on Arabic channels, sometimes videos, with Arabic translation subtitles. Some HVK respondents (responses: 3 often, 1 usually, and 1 always) said that they prefer to watch the news because the language used is formal and easier to understand, while others prefer to watch movies. During watching, all interviewees reported that they paid more attention to pronunciation, the source of difficulties for most of them. When they faced a new word, they try to understand it through context, otherwise they consulted a dictionary. Some HVK and MVK (responses: 1 occasionally, 1 often, 1 usually and 2 always) proceed to write the new words down and revise them from time to time; for LVK (responses: 1 never, 1 occasionally, 2 often, and 1 usually), the watching process usually ends by consulting a dictionary.

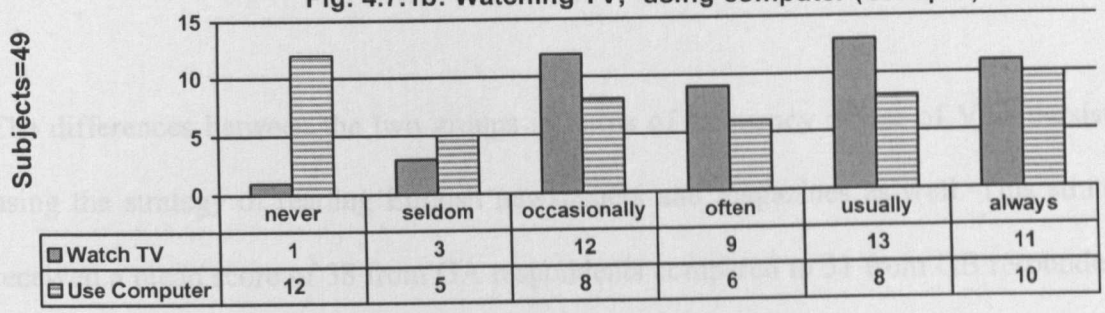
With respect to using computer programs for developing vocabulary acquisition, GA respondents reported infrequent use of this strategy with a low mean score of 29, whereas GB respondents reported more frequent use with a mean score of 49. The Mann-Whitney tests results (see appendix 11, page 289) showed that the difference between the two groups in terms of using computer programs was significant. Only seven GA respondents reported a very frequent use of it compared to 18 GB respondents who did so. On the other hand, 31 GA and 17 GB respondents reported that they had either never or seldom used this strategy, as shown in figures 4.7.1a and 4.7.1b below.

Fig. 4.7.1a: Watching TV; using computer (Group A)



	never	seldom	occasionally	often	usually	always
Watch TV	3	2	9	10	15	13
Use Computer	21	10	8	6	3	4

Fig. 4.7.1b: Watching TV; using computer (Group B)



	never	seldom	occasionally	often	usually	always
Watch TV	1	3	12	9	13	11
Use Computer	12	5	8	6	8	10

Most student interviewees said that they did not possess personal computers, and had no time to go to the internet cafés where they could access this service. The few HVK (responses: 1 never, 2 seldom, 1 often, and 1 always) and MVK respondents (responses: 2 never, 2 seldom, 1 always) who reported a frequent use of this strategy, used computers mainly for looking for information and pleasure with little concentration on vocabulary.

The LVK respondents (responses: 3 never, 1 seldom, 1 occasionally) reported no use of computer programs for learning.

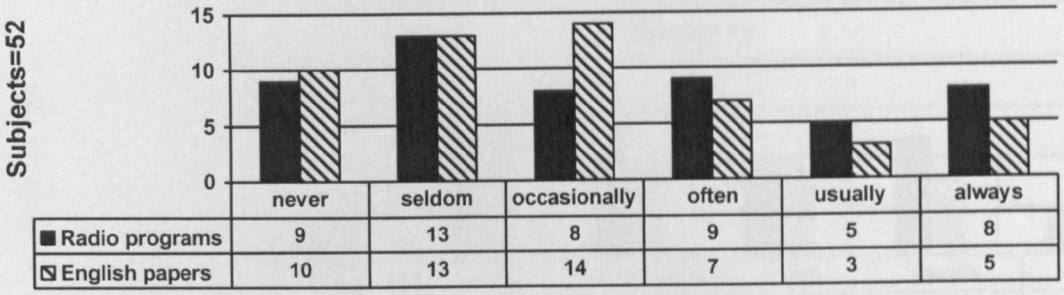
Similarly GB respondents reported much more frequent use of listening to English radio programmes and reading English newspapers and magazines than GA respondents. The Mann-Whitney tests results (see appendix 11, page 289) showed that the differences between the two groups in terms of using these strategies were also significant. With respect to listening to English radio programmes, it received a mean score of 61 from GB compared to 45 from GA. 13 GA respondents and 20 GB respondents reported a very frequent use of this strategy. On the other hand, while 22 GA respondents reported a very infrequent use of it, only eight GB respondents did so, as shown in figures 4.7.1c and 4.7.1d below. Some student interviewees said it is beneficial because the attention is paid more to listening with no distractions like pictures in case of watching TV, while others said that their attention is so easily distracted that they might think of something else while listening to radio.

The differences between the two groups in terms of frequency of use of VLS persist in using the strategy of reading English newspapers and magazines as well. This strategy received a mean score of 38 from GA respondents compared to 51 from GB respondents. A minority of GA respondents (8 students) reported a very frequent use of it compared to 20 GB respondents who did so. On the other hand, 23 GA and 18 GB respondents reported a very infrequent use of it as illustrated in figures 4.7.1c and 4.7.1d below.

The interviewees responses were: HVK (responses: 1 seldom, 2 often, and 2 always) MVK (responses: 2 seldom, 2 occasionally and 1 often) and LVK (responses: 3 never, 1

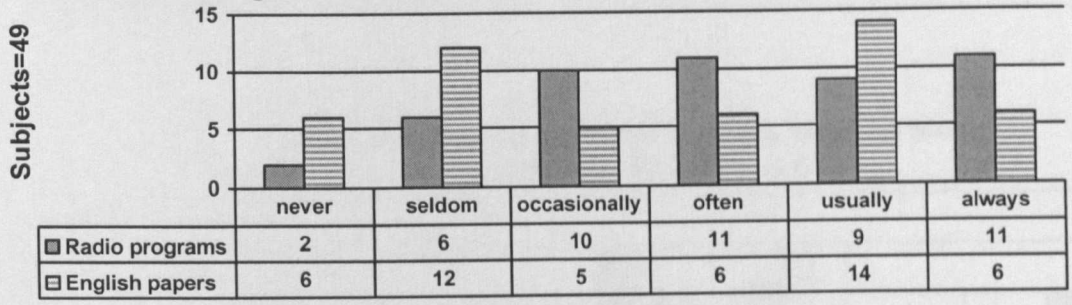
seldom, and 1 occasionally). All interviewees agreed that there was always a shortage of such newspapers and magazines, and even if they were available in some big cities, their prices were expensive. One MVK student (N2) commented "Journalism in Libya is Arabic; every thing is written in Arabic". There were differences among the few students who reported that they had used this strategy. While some of them rarely read some old papers they kept for a long time, others (2 HVK) were lucky enough to have access to new newspapers and magazines through some members of their families, so they could read some newspapers or/and magazines regularly.

Fig. 4.7.1c: Listening to radio; reading newspapers (Group A)



	never	seldom	occasionally	often	usually	always
Radio programs	9	13	8	9	5	8
English papers	10	13	14	7	3	5

Fig. 4.7.1d: Listening to radio; reading newspapers (Group B)



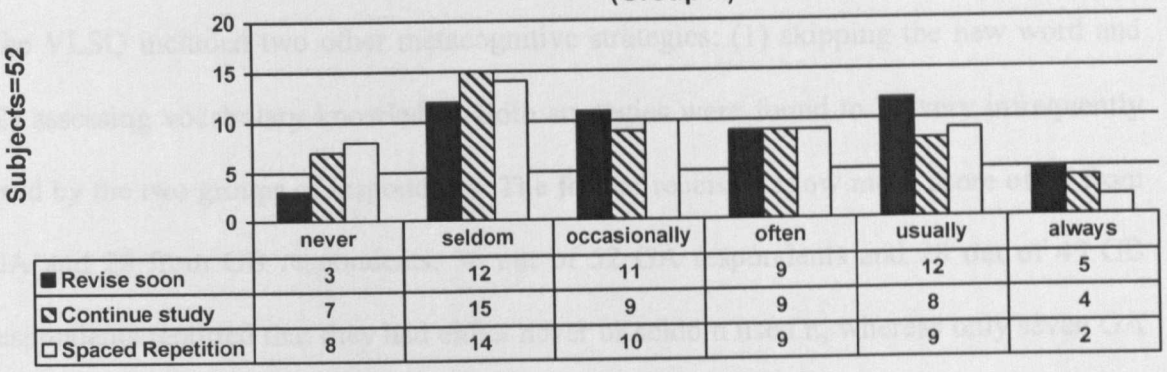
	never	seldom	occasionally	often	usually	always
Radio programs	2	6	10	11	9	11
English papers	6	12	5	6	14	6

4.7.2. Study Word

The VLSQ included three strategies for study word: (1) revising words soon after the initial meeting, (2) revising words using spaced repetition, and (3) continuing to study the word over time.

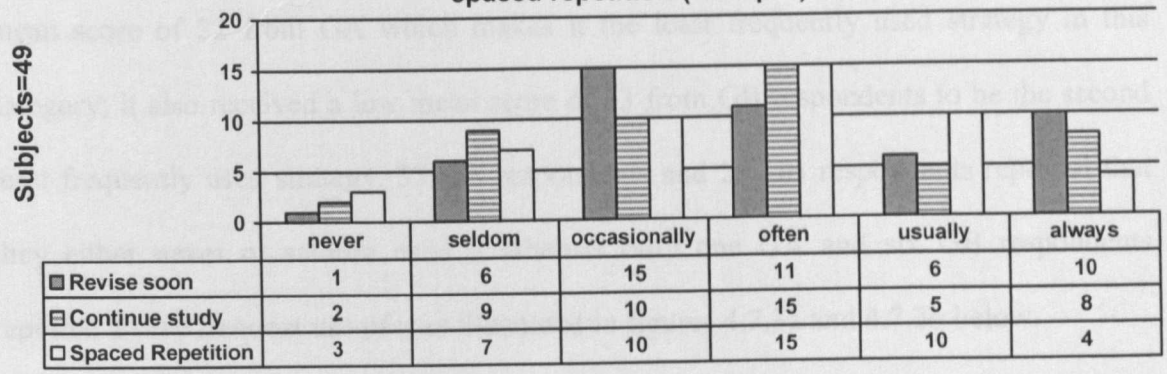
Although GB respondents reported more use of these three strategies, both groups were consistent in terms of using the strategy of revising words soon after the initial meeting more frequently than the two other strategies. It received a moderate mean score of 52 from GA and 58 from GB respondents with a majority of respondents (20 GA and 26 GB) reporting a frequent use of it; 17 GA and 16 GB respondents a very frequent use; 15 GA and seven GB a very infrequent use, as shown in figures 4.7.2a and 4.7.2b below. Some students said that using this strategy was restricted to what they consider important words; others used this strategy just to make sure that they still remember the meaning of the newly learned words.

Fig. 4.7.2a: Revise soon after meeting; continue study; spaced repetition (Group A)



	never	seldom	occasionally	often	usually	always
Revise soon	3	12	11	9	12	5
Continue study	7	15	9	9	8	4
Spaced Repetition	8	14	10	9	9	2

Fig. 4.7.2b: Revise soon after meeting; continue study; spaced repetition (Group B)



	never	seldom	occasionally	often	usually	always
Revise soon	1	6	15	11	6	10
Continue study	2	9	10	15	5	8
Spaced Repetition	3	7	10	15	10	4

With regard to the last two strategies: revising words using spaced repetition, and continuing to study word over time, again GB respondents reported more frequent use of

them than GA respondents. By conducting the Mann-Whitney tests, the results (see appendix 11, page 289) showed that the differences between the two groups in terms of using these strategies were significant. These strategies respectively received mean scores of 41 and 43 from GA compared to 54 and 55 from GB respondents. The majority (22) of GA respondents reported infrequent use of them, compared to the minority (10 to 11) of GB who reported so; see figures 4.7.2a and 4.7.2b above for more raw scores. Some student interviewees said that their study and revision of words usually occured randomly when they meet a word while reading, i.e., incidentally not intentionally.

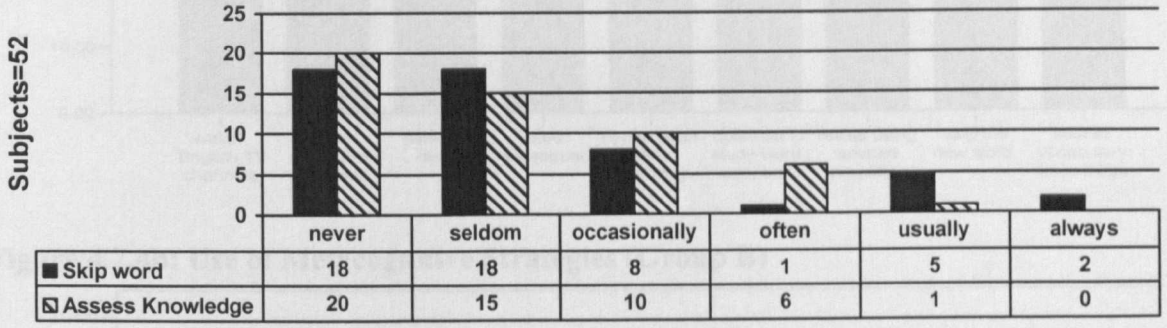
4.7.3. Other Metacognitive Strategies

The VLSQ included two other metacognitive strategies: (1) skipping the new word and (2) assessing vocabulary knowledge. Both strategies were found to be very infrequently used by the two groups of respondents. The former received a low mean score of 26 from GA and 28 from GB respondents. 36 out of 52 GA respondents and 28 out of 49 GB respondents reported that they had either never or seldom used it, whereas only seven GA and five GB respondents reported a very frequent use. The latter was also among the least used metacognitive strategies especially by the respondents of GA. It received a very low mean score of 22 from GA which makes it the least frequently used strategy in this category; it also received a low mean score of 33 from GB respondents to be the second least frequently used strategy. 35 GA respondents and 26 GB respondents reported that they either never or seldom used it whereas only one GA and six GB respondents reported a very frequent use of it as illustrated in figures 4.7.3a and 4.7.3b below.

The interviewees responses to skipping the new word were: HVK (3 never, 1 seldom, and 1 usually) MVK (2 never, 2 seldom, and 1 occasionally) and LVK (1 never, 2 seldom,

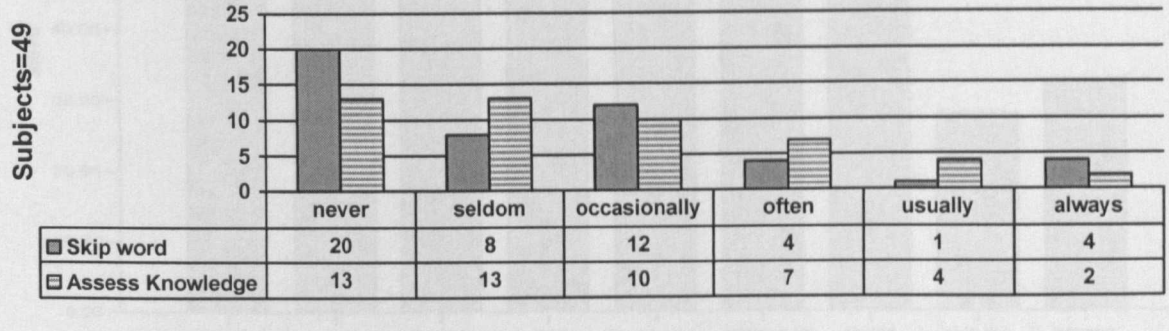
and 2 often). Most of interviewees reported that they usually look up almost every individual unknown word in dictionary. One HVK student commented that skipping unknown words depends on the task; if the task is reading for pleasure, she does not interrupt the flow of reading because of an unknown word. With regard to assessing vocabulary knowledge, some HVK and MVK respondents said that they sometimes ask each other, or being asked by some family members questions like "what does this word mean?", or sometimes when they interact with each other in English where they argue about and correct each other's pronunciation of words. Some LVK students assessed their vocabulary by writing the new learned words down to make sure of correct spelling, and this usually used to happen during their study for exams such as the reading comprehension exam.

Fig. 4.7.3a: Skip word; assess word knowledge (Group A)



	never	seldom	occasionally	often	usually	always
Skip word	18	18	8	1	5	2
Assess Knowledge	20	15	10	6	1	0

Fig. 4.7.3b: Skip word; assess word knowledge (Group B)



	never	seldom	occasionally	often	usually	always
Skip word	20	8	12	4	1	4
Assess Knowledge	13	13	10	7	4	2

4.7.4. Summary of the Use of Metacognitive Strategies

Regardless of the differences in mean scores between the two groups as we see in tables 4.7 above, the rank order between strategies is almost identical for both groups, see figures 4.7.4a and 4.7.4b below. The strategies of skipping the new word and assessing vocabulary knowledge were found to be the least frequently used by both groups, whereas the strategy of watching TV was the most frequent one.

Figure 4.7.4a: Use of Metacognitive Strategies (Group A)

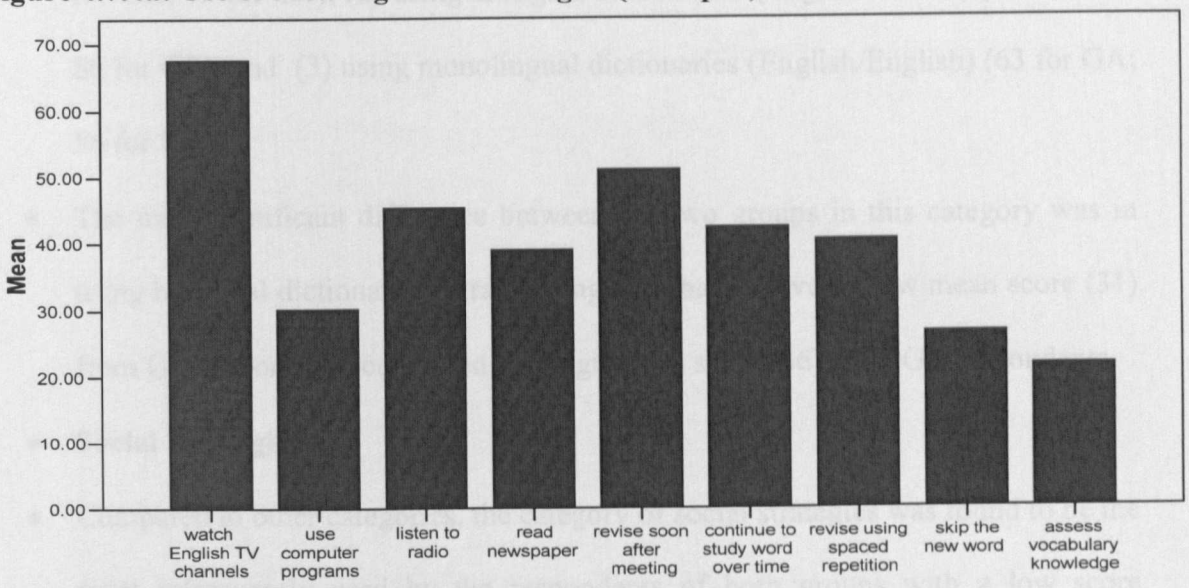
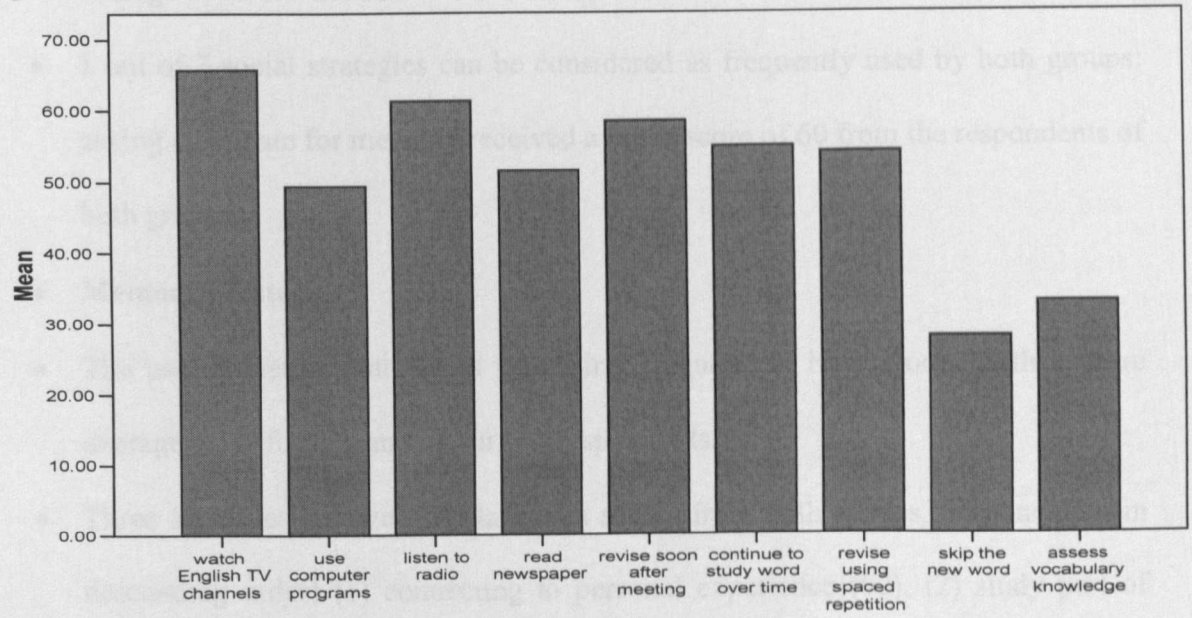


Figure 4.7.4b: Use of Metacognitive Strategies (Group B)



4.8. Summary of the Use of VLS

This section provides a detailed summary of the two groups' VLS in the five categories

- **Determination strategies**
- The determination strategies were found to be quite frequently used by both groups with a score average of 56 for group A (GA) and 58 for group B (GB); the most frequent strategies (in descending order) were (1) guessing from context (81 for GA; 73 for GB), (2) using bilingual dictionaries (English/Arabic) (76 for GA; 86 for GB), and (3) using monolingual dictionaries (English/English) (63 for GA; 56 for GB).
- The most significant difference between the two groups in this category was in using bilingual dictionaries (Arabic/ English) that received a low mean score (31) from GA respondents compared to a high mean score (66) from GB respondents.
- **Social Strategies**
- Compared to other categories, the category of social strategies was found to be the most infrequently used by the respondents of both groups with a low score average of 33 for GA and 39 for GB respondents.
- 1 out of 7 social strategies can be considered as frequently used by both groups: asking classmate for meaning received a mean score of 60 from the respondents of both groups.
- **Memory Strategies**
- The use of memory strategies was fairly frequent by both groups with a score average of 47 for GA and 52 for GB respondents.
- Three strategies received similar mean scores from both groups, they include (in descending order) (1) connecting to personal experience (62), (2) study part of speech (54), and (3) make image of the form of the word (45).

- Connecting to personal experience was the most frequently used strategy (62 for both groups) for GA respondents, whereas studying the sound of the word (55 for GA; 65 for GB) and studying spelling (57 for GA; 65 for GB) were the most frequently used strategies for GB respondents.
- The two groups were consistent in terms of ranking the least frequently used memory strategies; they were (in ascending order) as follows: (1) use keyword method (22 for GA and 34 for GB), (2) Use scales for gradable adjectives (27 for GA; 49 for GB), (3) associate word with its coordinates (35 for GA; 41 for GB), (4) Make image of the form of the word (45 for both groups).
- **Cognitive Strategies**
- The category of cognitive strategies was ranked in the middle position in terms of use by GA respondents with a score average of 47; whereas for GB respondents, this category is sharing the top position with the determination strategies with a score average of 58.
- Both groups ranked the two strategies of (1) repeating the word over and over (68 for GA; 73 for GB), and (2) writing the word many times (59 for GA; 62 for GB) at the top in terms of use with higher mean scores for GB respondents.
- Keeping vocabulary notebook was one of the least frequently used strategies for GA with a low score of 34, whereas it is quite frequently used by GB respondents with a mean score of 56.
- **Metacognitive Strategies**
- With score averages of 41 for GA and 51 for GB respondents, the metacognitive strategies were more frequently used by GB respondents.
- Similarities between the two groups in terms of using metacognitive strategies exist in the rank order among strategies; the two strategies of (1) skipping the new

word (26 for GA; 28 for GB) and (2) assessing vocabulary knowledge (22 for GA; 33 for GB) were the least frequently used by both groups, whereas the strategy of watching TV (67 for GA; 66 for GB) was the most frequently used.

- The significant differences between the two groups in terms of mean scores include (in descending order) the strategies of (1) using computer programs (29 for GA; 49 for GB), (2) listening to English radio programmes (45 for GA; 61 for GB), (3) reading English newspapers and magazines (38 for GA; 51 for GB), (4) revising words using spaced repetition (41 for GA; 54 for GB), and (5) continuing to study word over time (43 for GA; 55 for GB).

4.9. Respondents' Evaluation of VLS

This section comprises two subsections: (1) it covers students' perceptions of the most helpful strategies for them, and (2) it presents any other strategies they might use which were not covered in the VLSQ.

4.9.1. Most Helpful Strategies

As mentioned above, the VLSQ analysis is based on 101 completed questionnaires returned out of the 112 that were distributed to subjects; the analysis of the rating question is based on 93 responses to this question out of 101 completed questionnaires; that is to say both groups here were treated together because the findings of the rating question were identical for both groups; in addition, although differences and similarities in terms of VLS use have been identified, comparing the two groups is not the aim of this study. Respondents were asked to rate the ten most helpful strategies for them. The results for this rating task were scored in two ways (taken from Schmitt, 1997). First, a numerical

rating where a point was given to each strategy rated among the ten most helpful, so there is no difference in ranking between the first place or the tenth place. Second, a weighted rating where 10 points were given to the first place vote, nine points to the second place vote, and so on down to the tenth place. So the maximum weighed rating score would be 930 (93 first place votes multiplied by ten). The results of both rating ways are shown in table 4.9.1 below.

Table 4.9.1a: The ten most helpful rated strategies

Strategy	Numerical rating /93 max	Weighted rating /930 max
Watching English TV channels	**54**	**367**
Verbal repetition.	**38**	**308**
Bilingual dictionary (English / Arabic)	**48**	**238**
Monolingual Dictionary (English/English)	**34**	**219**
Connect word to a personal experience	**33**	**206**
Guess the meaning of the word from context	**39**	**203**
Identify the part of speech of the word	**26**	**198**
Break the word up into the main parts	**25**	**166**
Say the new word aloud when studying	**32**	**154**
Study the spelling of the new word	**22**	**152**

If we compare these results with the results of the respondents' use of VLS, we will find that both are largely congruent, i.e. the strategies which were rated in the top ten were among the most frequently used strategies by the respondents as shown in table 4.9.1b below. Some possible explanations for this will be discussed later in Chapter six, Section 6.2.3, page 204.

Table 4.9.1b: Comparison of student beliefs with mean scores

Strategy	Ranking for students beliefs	Ranking for mean scores in VLS
Watching English TV channels	1	4
Verbal repetition	2	3
Bilingual dictionary (English / Arabic)	3	1
Monolingual Dictionary (English/English)	4	8
Connect word to a personal experience	5	5
Guess the meaning of the word from context	6	2
Identify the part of speech of the word	7	9
Break the word up into the main parts	8	10
Say the new word aloud when studying	9	6
Study the spelling of the new word	10	7

4.9.2. Strategies not covered in the VLSQ

In the last question of the VLSQ, students were asked to add any additional strategies they have used that were not covered in the VLSQ. Some students mentioned few strategies that had already been covered in the VLSQ. However, the following 2 strategies were added by 5 GA and 1 GB respondents as shown in table 4.9.2 below.

Table 4.9.2: Strategies not covered in the VLSQ

Strategy	Number of students and group
• Learning new words through speaking to tourists and friends who are non-native Arabic speakers.	4 (GA) and 1 (GB)
• Using electronic dictionaries for improving pronunciation.	1 (GA)

Excluding the strategy of interacting with native speakers from the VLSQ was a deliberate choice by the researcher because it was thought highly unlikely that students

would have any chances to do that either in or out of university where the L1 is the dominant language. The strategy of using electronic dictionary for improving pronunciation echoes with responses of using monolingual dictionaries for the same purpose.

4.10. Analysis of Part One of the Interviews

As mentioned in Chapter three, Section 3.7.5, the interview questions were divided into two parts and we have already analyzed part two earlier in this Chapter. In part one which seeks information about interviewees' general feelings about vocabulary as an aspect of learning a language, the three groups of interviewees were asked some questions and their answers will be compared where appropriate. Questions were worded in English, but Arabic translation was provided by the researcher and students could use either language. The following are the questions asked in part one of the interviews.

1. Do you think you are a good learner?
2. Do you find vocabulary useful?
3. Do you have any problems related to vocabulary in all skills?
4. What difficulties do you face in learning vocabulary?
5. How important is vocabulary in communication for you?
6. Do you pay enough attention to vocabulary acquisition outside class or rely mainly on the subject material?
7. What aspects of word knowledge do you focus on, i.e. which are the most important aspects for you?
8. What do you think of vocabulary learning strategies (VLS), helpful, not helpful, should be taught, easy to use etc.
9. Have you received any training of how to use these strategies inside or outside class?

As mentioned earlier in section 3.8.2, student interviewees were divided into three groups according to their vocabulary knowledge scores. When providing quotations, students' initials will be used plus numbers 1, 2, or 3 that indicate which group. Quotations

originally in Arabic were translated into English, written in italics and put in brackets; quotations in English were put in quotation marks.

1. **Do you think you are a good learner?**

HVK students thought they are good learners, (R1) commented "we are doing what we can but I hope to be a good learner"; while M1 and A1 said "somehow, yes". Some MVK students were not quite sure whether they are good learners or not, W2 said "I do not know"; F2 and A2 commented saying, "not exactly". While S2 and N2 seemed to be more confident, they said respectively "I think so", "I am satisfied with my level". While LVK responses which were all in Arabic indicated that these students were not satisfied with their level as language learners. N3, A3 and M3 said (*we do not think we are good learners and wish to be better*), while L3 and S3 said that (*we usually neglect conversation in English*).

2. **Do you find vocabulary useful?**

All students strongly agreed that vocabulary is the most useful of all aspects of language learning.

3. **Do you have any problems related to vocabulary in all skills?**

As HVK students, M1, R1 and A1 reported that they had some problems in writing, in pronunciation during speaking and in understanding meaning when reading, whereas F1 said "I have no problems at all". For MVK students, A2 and S2 reported problems in pronunciation in terms of speaking, F2 indicated that she sometimes knows the pronunciation of some words very well but when she tries to say those words in actual speaking situations she faces difficulties pronouncing them. She added (*I am afraid of*

making mistakes). They also had the problem of lack of vocabulary when they speak, so they use paraphrasing or synonyms to solve this problem. Knowing the meaning of some words is a problem they face in reading for N2 and S2 who also faces the problem of how to read some words. They also have problems such as spelling mistakes when they write. N2 said (*my problem is that I always read but rarely write, so I sometimes have difficulties writing even the "normal" words that I know*). F2 said (*I have many spelling mistakes, especially in words starting with 'kn'*). In addition they reported a lack of vocabulary knowledge so when they write in L2 they sometimes use bilingual Arabic/English dictionaries.

LVK also face problems related to vocabulary. In speaking, N3 mentioned the problem of pronunciation saying (*Sometimes I know the word but I do not say it because I am not sure of its pronunciation*), while M3 faces the problems of lack of vocabulary knowledge, i.e. problems of competence and performance. S3 and L3 said speaking is problem for us; S3 commented (*I am not confident enough to speak in English before students or the teacher*). (*I never speak*) said L3. S3 added (*sometimes I have the idea but my vocabulary knowledge does not help me to express myself*). In terms of reading, they indicated that they had problems in pronunciation and understanding meaning. Regarding writing they mentioned the problem of spelling and lack of productive vocabulary, so they sometimes use Arabic/ English dictionaries.

4. What difficulties do you face in learning vocabulary?

HVK reported that they had problems in pronunciation, spelling, and knowing part of speech. All these problems were reported by MVK and LVK as well. MVK also mentioned the problem of attrition, especially in low frequency words.

5. **How important is vocabulary in communication for you?**

HVK, MVK and LVK students reported that vocabulary is the most important aspect in language learning. M1 said "our attention must be paid to vocabulary, I have no vocabulary I can not communicate with any body"; supporting M1's idea, R1 said "if there is no vocabulary there is no communication". W2 said "it is important to make conversation with somebody else". In addition, M3 said (*if I have vocabulary, I will be able to speak, and will have no problems*) and L3 said (*words are necessary when I want to make a sentence*).

6. **Do you pay enough attention to vocabulary acquisition outside class or rely mainly on the subject material?**

All HVK students reported that they pay attention to vocabulary acquisition outside class through using other sources like lists of vocabulary (glossary), watching English TV channels, listening to songs and reading newspapers and scientific books. Thus, they do have other sources of input rather than the subject materials in class. On the other hand, they indicated that class materials serve as basis from which they can develop their vocabulary knowledge.

Unlike HVK students, MVK students reported different responses; while two of them (W2 and N2) reported that they frequently paid attention to vocabulary acquisition outside class. W2 said (*In summer time, I always read children stories which was recommended by my teacher as excellent for pleasure and vocabulary acquisition*). In this respect, N2 said (*if I depend on class material, my proficiency level will be very low, I do not want to pass exams, I want to develop my language, so I always*) "listen to music; I watch TV, especially English programmes". The other three students (A2, S2, F2), on the

other hand, indicated that they mainly depend on class material. F2 said (*I rely on class material, but if I watch a movie sometimes a strange word attracts my attention so I look it up in dictionary*). Similarly, some LVK students paid some attention to vocabulary acquisition outside the class through learning directly from dictionary or sometimes listening to English songs, while others indicated that they mostly rely on class material.

7. **What aspects of word knowledge do you focus on, i.e. the most important aspects for you?**

All students focus on almost the same aspects of word knowledge beginning respectively with meaning, pronunciation, part of speech, synonyms, and using words in sentences. Some MVK students said that the focus depends on the learning task, for example, in reading comprehension tasks, we concentrate on pronunciation, while in translation tasks we concentrate more on meaning.

8. **What do you think of vocabulary learning strategies (VLS), helpful, not helpful, should be taught, easy to use etc?**

All student interviewees thought that VLS are helpful and are not easy to use. Learners also said that VLS are very important for them and should be taught, although they reported that they had never been taught how to use VLS.

9. **Have you received any training of how to use these strategies inside or outside class?**

All answered: never.

One point to establish is that during the interviews, HVK students used English more than Arabic, whereas for the MVK and the LVK students, Arabic was the dominant language.

4.11. Chapter Summary

This chapter presented the analysis of the VLS used by the Libyan EFL learners, the data obtained from the VLSQ and the group interviews. It included descriptive analysis of the range and the frequency of use of 44 VLS and provided some in-depth information (obtained from the interviews) about students use of VLS. In terms of the two broader categories of discovery and consolidation strategies, the findings indicate that the Libyan English majors used discovery strategies more than the consolidation strategies. More precisely, the use of the category of determination strategies comes at the top compared to the other categories by both groups of respondents; while the category of the social strategies comes at the bottom (detailed summary of the use of VLS is outlined above in Section 4.8). This chapter proceeded to analyze the students' rating of the most helpful strategies for them, which indicated that the strategies which were rated in the top ten were among the most frequently used strategies by the respondents. This chapter ended with providing analyses of part 1 of the interviews which outlined how our respondents used various VLS. Their responses indicated that they had never been trained in how to use VLS , so that they use certain VLS badly or ineffectively. The relationship between the Libyan EFL learners' use of VLS and their vocabulary knowledge will be presented in the following chapter, but before that analyses of the learners' vocabulary knowledge scores will be outlined.

CHAPTER FIVE
Analysis of Vocabulary and Motivation Tests Data

5.1. Introduction

This chapter of data analysis presents the results of the subjects' vocabulary knowledge in terms of three dimensions: reception, controlled production and free production, measured respectively through three vocabulary tests: the Vocabulary Levels Test (VLT), the Vocabulary Size Test of Controlled Productive Ability (CPA) and the Vocabulary Size Test of Free Productive Ability (FPA), as described in Chapter 3, Section 3.4.3. This will be followed by presenting the relationship between these three dimensions of vocabulary knowledge as well as their relationship to the vocabulary learning strategies (VLS) used by the Libyan EFL students, described in the previous Chapter. These relationships will be obtained through utilizing a Pearson Product Moment Correlation as well as a multiple regression analysis. Finally, analysis of the motivation test scores will complete this chapter.

5.2. Data Analysis

Unlike those for the VLSQ analysis, the vocabulary tests analyses are based on the full 112 respondents (56 Group A and 56 Group B). The two groups of students (Group A and Group B) will again be kept separate in presenting the results, but will be compared where appropriate. Utilizing the descriptive statistics which are generally used to analyze data obtained from descriptive research (Seliger and Shohamy, 1989), the findings of the three vocabulary tests: VLT, CPA and FPA were analyzed to explore 13 different scores in the vocabulary tests: The VLT test samples 30 items at each of the four levels: the 2000 word level, 3000 word level, 5000 word level, and the university word list (UWL), and the CPA samples 18 items at each of the four levels. Each subject had five scores in

the VLT and CPA tests: a score for the number of correct items at each level and a Total score. Moreover, each subject had three other scores in the FPA test: a score for the number of correct items for each of the two topics (parts of the body, and learning and teaching English) and a Total score for correctly written items. The motivation test scores were also analyzed by utilizing the descriptive statistics to explore both the learners' integrative and instrumental motivation.

Skehan (1991) states that whatever measures a researcher might use, it is important to measure their inter-relationships. "Correlational techniques are used for analyzing data obtained from descriptive research" (Seliger and Shohamy, 1989, p.218). Gu and Johnson (1996) utilized the Pearson Product Moment Correlations to explore relationships between the Chinese EFL learners' VLS and their vocabulary size as well as their general proficiency level. So in addition to the descriptive statistics, in this study the Pearson Product Moment Correlation was used to explore correlations among the learner' three vocabulary knowledge dimensions in terms of reception controlled production and free production measured respectively by the VLT, CPA, and FPA tests, and correlations between these three dimensions of vocabulary knowledge and the learners' vocabulary learning strategies (VLS). This was followed by performing multiple regression analyses to make the picture of the relationship between the learners' VLS and their vocabulary knowledge clearer. The Pearson Product Moment Correlation was also utilized to find out how the learners motivation to learn English was correlated with their VLS and vocabulary knowledge. Typically significant correlations between variables in second language learning studies range between 0.30 (weak correlation) to 0.60/0.70 (strong correlation) "given the multi-causal nature of language learning" (Skehan, 1991, p.13).

5.3. Descriptive Analysis of the Scores of Vocabulary Tests

The descriptive analysis comprises the minimum, maximum, mean and standard deviations of each frequency level of the VLT, CPA and FPA for both groups: Group A (GA) and Group B (GB), see Appendix 8.

5.3.1. The Vocabulary Levels Test (VLT)

Table 5.3.1 shows the students' receptive vocabulary size at each of the four frequency levels of the Vocabulary Levels Test (VLT): the 2000VLT, 3000VLT, 5000VLT, the University Word List (UWL VLT) and the TotalVLT score.

Table 5.3.1: Descriptive Statistics for the VLT scores (Max 30)

Word Frequency	Minimum		Maximum		Mean		Mean %		Std. Deviation	
	GA	GB	GA	GB	GA	GB	GA	GB	GA	GB
2000VLT	7	1	30	26	19.1	11.6	63.6	38.6	6.4	4.6
3000VLT	2	0	28	17	12.5	5.3	41.6	17.6	7.1	3.5
5000VLT	0	0	22	11	6.4	1.9	21.3	6.3	5.9	2.6
UWLVLT	0	0	24	16	9.4	4.4	31.3	14.6	6.1	4.0
TotalVLT	16	3	103	62	47.7	23.3	39.7	19.4	23.2	12.1

The VLT scores are out of 30 at each level and the Total score is out of 120, so if we look at table 5.3.1, we find that there are many individual differences among learners in terms of the range of scores achieved (e.g. 7-30 for GA; 1-26 for GB in the 2000VLT). Moreover, the mean scores in all frequency levels for GA are significantly higher than those for GB; see Appendix 12, page 297.

5.3.2. The Vocabulary Size Test of Controlled Productive Ability (CPA)

Compared to receptive vocabulary knowledge, the Libyan students' controlled productive vocabulary knowledge is less, as shown in table 5.3.2 below.

Table 5.3.2: Descriptive Statistics for the CPA scores (Max 18)

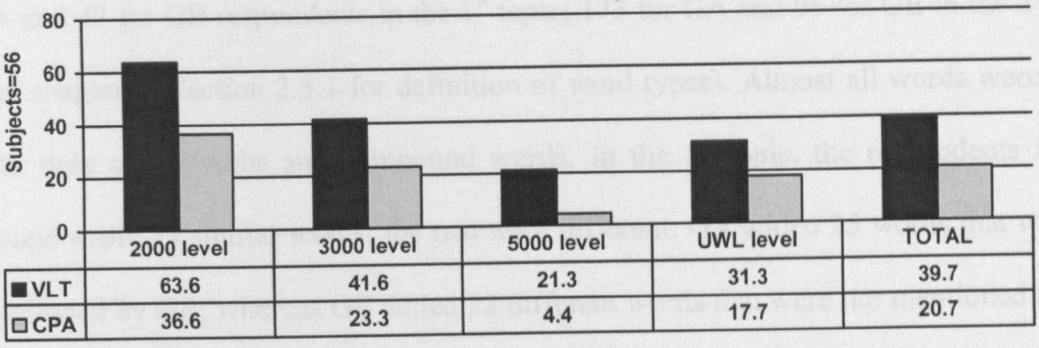
Word Frequency	Minimum		Maximum		Mean		Mean %		Std. Deviation	
	GA	GB	GA	GB	GA	GB	GA	GB	GA	GB
2000CPA	0	0	15	11	6.6	3.5	36.6	19.4	3.5	2.3
3000CPA	0	0	11	5	4.2	1.6	23.3	8.8	2.4	1.3
5000CPA	0	0	4	3	.80	.39	4.4	2.1	1.1	.73
UWLCPA	0	0	10	7	3.5	1.5	17.7	8.3	2.7	1.7
TotalCPA	0	0	36	23	14.9	7.1	20.6	9.8	8.6	4.9

In all word frequency levels including the Total scores for the CPA, there are students in both groups who achieved a minimum score of 0 whereas the highest score does not exceed 16 out of 18 for group A (GA) respondents and 11 for group B (GB) respondents. But bear in mind that unlike the VLT scores, the scores for the CPA are out of a maximum score of 18 and the Total score is out of 72. GA scores for the CPA test are also higher than GB ones.

5.3.3. Comparison of the mean scores of the VLT and the CPA

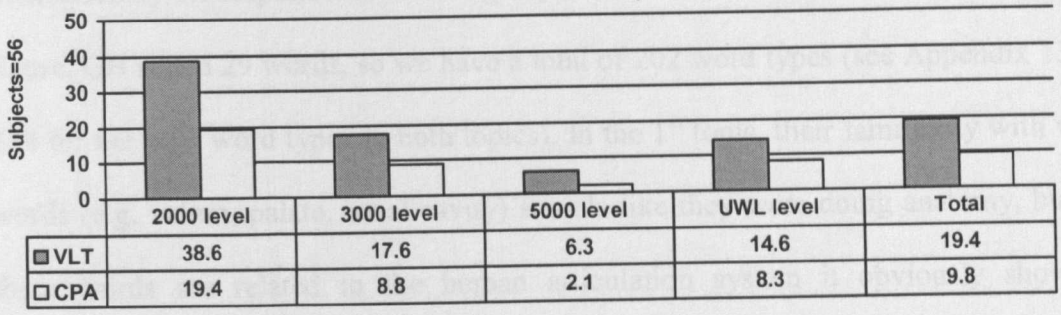
As shown in figures 5.3.3a and 5.3.3b below, learners in both groups achieved higher scores in the VLT than the CPA. Also the gap between the scores gets wider as we move from the lower frequency levels to the higher frequency levels.

Fig. 5.3.3a: Comparing the mean percentages of the VLT and the CPA (Group A)



	2000 level	3000 level	5000 level	UWL level	TOTAL
VLT	63.6	41.6	21.3	31.3	39.7
CPA	36.6	23.3	4.4	17.7	20.7

Fig. 5.3.3b: Comparing the mean percentages of the VLT and the CPA (Group B)



	2000 level	3000 level	5000 level	UWL level	Total
VLT	38.6	17.6	6.3	14.6	19.4
CPA	19.4	8.8	2.1	8.3	9.8

5.3.4. The Vocabulary Size Test of Free Productive Ability (FPA)

This descriptive analysis includes the students' free productive vocabulary size at each of the two measures of the FPA: parts of the body (1st topic) and learning and teaching English (2nd topic) and the Total score, as we can see in table 5.3.4 below. Similarly, GA respondents achieved higher scores than GB respondents in both tests of the FPA as illustrated by the mean scores for both groups.

Table 5.3.4: Descriptive Statistics for the FPA scores

Test	Minimum		Maximum		Mean		Std. Deviation	
	GA	GB	GA	GB	GA	GB	GA	GB
1st topic FPA	7	3	36	27	16.1	11.6	6.5	4.8
2nd topic FPA	2	2	39	28	16.6	10.1	7.9	5.8
TotalFPA	12	5	72	55	32.7	21.8	12.3	9.7

The respondents to the FPA were able to write down many word types: a total of 60 for GA and 47 for GB respondents in the 1st topic; 173 for GA and 96 for GB in the 2nd topic (see chapter 2, Section 2.3.1 for definition of word types). Almost all words were nouns with only a few verbs and compound words. In the 1st topic, the respondents in both groups wrote 35 similar words; the rest were different. GA added 25 words that were not mentioned by GB; whereas GB added 12 different words that were not mentioned by GA. Thus, we have a total of 72 word types. In the 2nd topic, 67 words were similarly mentioned by the respondents of both groups; while GA added 106 different words to this figure, GB added 29 words, so we have a total of 202 word types (see Appendix 13, page 299 for the total word types in both topics). In the 1st topic, their familiarity with various words (e.g. velum, palate, nasal cavity) sounds like they were doing anatomy, but since these words are related to the human articulation system it obviously shows that respondents had been taught phonetics courses.

Although it is not the aim of this study to compare the results of the two groups (group A and group B), by conducting the Mann-Whitney tests the results showed that the differences between the two groups in terms of their scores in the three tests (VLT, CPA and FPA) were very significant; see Appendix 12, page 297.

5.4. The Relationship between Vocabulary Test Scores

The Pearson Product Moment Correlation was utilized to find out whether there are statistically significant correlations across all the vocabulary knowledge measures: VLT, CPA and FPA. The first point to establish is that there is an internal positive correlation among the elements of the VLT, CPA and FPA.

5.4.1. The Vocabulary Levels Test (VLT)

As illustrated in table 5.4.1 below, there were positive correlations among all word frequency levels. All levels had high correlations with the *TotalVLT* score. Other correlations were in general high especially those between the *2000VLT* and the *3000VLT* word levels on one hand, and between the *5000VLT* and the *UWLVLT* on the other. What can be noticed here is that the correlations for GA scores across all word levels were higher than those for GB respondents.

Table 5.4.1: Correlations across VLT scores

Word Levels	2000VLT		3000VLT		5000VLT		UWLVLT		TotalVLT	
	GA	GB	GA	GB	GA	GB	GA	GB	GA	GB
2000VLT			.80**	.62**	.67**	.43**	.68**	.54**	.88**	.84**
3000VLT					.82**	.38**	.73**	.44**	.93**	.76**
5000VLT							.79**	.76**	.90**	.75**
UWLVLT									.88**	.84**
TotalVLT										

Note: **Significant at p < .01; *Significant at p < .05

5.4.2. The Vocabulary Size Test of Controlled Productive Ability (CPA)

Similarly, there are significant correlations among all CPA scores for both groups with considerably higher correlations among GA scores as shown in table 5.4.2 below. While the correlation between the *2000CPA* and the *UWLCPA* is .71 at the significant value of p< .01 for GA students, it is only .37 for GB students. The correlation between the *2000CPA* and the *5000CPA* for GA is .51 which is still statistically significant compared to GB where no statistically significant correlation was found (r = .20).

Table 5.4.2: Correlations across CPA scores

Word Levels	2000CPA		3000CPA		5000CPA		UWLCPA		TotalCPA	
	GA	GB	GA	GB		GA	GB	GA	GA	GB
2000CPA			.66**	.62**	.51**	.20	.71**	.37**	.90**	.81**
3000CPA					.58**	.51**	.64**	.60**	.84**	.86**
5000CPA							.66**	.63**	.72**	.61**
UWL CPA									.89**	.79**
TotalCPA										

Note: **Significant at p < .01; *Significant at p < .05

5.4.3. The Vocabulary Size Test of Free Productive Ability (FPA)

As shown in table 5.4.3 below, The correlation between the scores of the two FPA tests indicate a moderate correlation of .42 for GA students and a high correlation of .66 for GB students, while high correlations were observed between the two scores of the FPA elements and the Total score for both groups.

Table 5.4.3: Correlations across FPA scores

Test Topic → ↓	1st topic: Parts of the Body		2nd topic: Learning and Teaching English		Total Score	
	Group A	Group B	Group A	Group B	Group A	Group B
1st topic: Parts of the Body			.42**	.66**	.81**	.89**
2nd topic: Learning and Teaching English					.87**	.92**
Total Score						

Note: **Significant at p < .01; *Significant at p < .05

5.4.4. The relationship between the VLT and the CPA

Since there are degrees of vocabulary knowledge, the relationship between the students' receptive vocabulary knowledge measured by the VLT and the students' controlled productive vocabulary knowledge measured by the CPA will be explored. The results show significant correlations across all word frequency levels of the VLT and CPA. These correlations ranged form moderate to high with considerably higher correlations for GA students' scores than those for GB students. For example, a very high Correlation (r=.79, p<.01) between the *3000VLT* and the *3000CPA* for GA students compared to a low correlation (r=.31, p<.01) for GB students. Moreover, while a high correlation of (r=-.68, p<.01) between the *3000VLT* and the *2000CPA* for GA, no statistically significant correlation (.10) was observed for GB students. These and more correlations are illustrated in table 5.4.4 below.

Table 5.4.4: Correlations between VLT and CPA

Word Levels	2000CPA		3000CPA		5000CPA		UWLCPA		TotalCPA	
	GA	GB	GA	GB	GA	GB	GA	GB	GA	GB
2000VLT	.74**	.45**	.66**	.41**	.56**	.31**	.70**	.51**	.79**	.56**
3000VLT	.68**	.10	.79**	.31**	.54**	.35**	.64**	.40**	.78**	.33*
5000VLT	.61**	.40**	.75**	.50**	.64**	.44**	.58**	.57**	.74**	.59**
UWLVLT	.63**	.49**	.62**	.56**	.57**	.46**	.62**	.66**	.72**	.69**
TotalVLT	.73**	.46**	.79**	.55**	.64**	.47**	.70**	.66**	.84**	.67**

Note: **Significant at p < .01; *Significant at p < .05

5.4.5. The relationship between the VLT and the FPA

The analysis of the Pearson Product Moment Correlation revealed moderate correlations between all the scores of the VLT and the *1st topic* (parts of the body) and the Total score; scores ranged from .48 to .71 with relatively higher correlations for GB students. On the

other hand, a majority of the correlations between the VLT and the *2nd topic* (learning and teaching English) were found to be low (around .30s) with the highest correlation of (r=-.63, p<.01) for GA and (r=.53, p<.01) for GB students as shown in table 5.4.5.

Table 5.4.5: Correlations between VLT and FPA

Test Topic→	1st topic: Parts of the Body		2nd topic: Learning & Teaching English		Total Score	
Word Levels↓	GA	GB	GA	GB	GA	GB
2000VLT	.51**	.60**	.29**	.31**	46**	48**
3000 VLT	.54**	.60**	.31*	.33**	41**	50**
5000 VLT	.49**	.48**	.36**	.53**	39**	56**
UWL VLT	.51**	.58**	.63**	.40**	57**	53**
TotalVLT	.53**	.71**	.33*	.47**	50**	63**

NoteSignificant at p < .01; *Significant at p < .05**

5.4.6. The relationship between the CPA and the FPA

Like the correlations between the VLT and FPA scores, the results of the relationship between the CPA scores and the FPA scores indicate that the correlations between the CPA and the *1st topic* (parts of the body) were significantly higher than those of the CPA and the *2nd topic* (learning and teaching English). GA students achieved a higher correlation between the *2000CPA* and the *1st topic* of (r=.65, p<.01) for GA; (r=.41, p<.01) for GB, whereas GB students obtained a higher correlation between the *3000CPA* and the *2nd topic* (r=.53, p<.01) for GB; (.19) for GA which was not statistically significant. Table 5.4.6 below shows these and all the other correlations.

Table 5.4.6: Correlations between CPA and FPA

Test Topic→	1st topic: Parts of the Body		2nd topic: Learning & Teaching English		Total Score	
Word Levels↓	GA	GB	GA	GB	GA	GB
2000CPA	.65**	.41**	.43**	.39**	.62**	.44**
3000 CPA	.40**	.56**	.19	.53**	.34**	.60**
5000 CPA	.35**	.42**	.12	.31*	.27**	.39**
UWL CPA	.57**	.55**	.32**	.34**	.52**	.48**
TotalCPA	.61**	.61**	.35**	.50**	.56**	.60**

NoteSignificant at p < .01; *Significant at p < .05**

5.5. The relationship between VLS and vocabulary knowledge

This section aims at presenting the correlations between the subjects' vocabulary learning strategies (VLS) measured through the VLSQ and their vocabulary knowledge measured through three vocabulary measures (VLT, CPA, FPA). To be more manageable, the VLS will be dealt with in terms of the five categories of the VLS, as mentioned above in the introduction to this chapter.

5.5.1. The relationship between VLS and VLT

With respect to Group A (GA) respondents, as we can see in table 5.5.1a below, some weak to moderate correlations were found to be between the respondents' VLT scores and 13 VLS: six determination strategies, four memory strategies, two cognitive strategies, and one metacognitive strategy.

Table 5.5.1a: Correlations between VLS and VLT (Group A)

Strategy→ VLT levels↓	Determination Strategies	Memory Strategies	Cognitive Strategies	Metacognitive Strategies
	Identify part of speech	Use new word in sentences	keep vocabulary notebook	Read English newspapers
2000VLT	-	-	**-.30***	-
3000VLT	-	**.27***	-	**.32***
5000VLT	-	-	-	**.31***
UWLVLT	-	-	-	-
TotalVLT	**.28***	-		**.29***
	check for L1 cognate	paraphrase word meaning	Make own lists of words	-
2000VLT	**-.35***	-	**.31***	-
3000VLT	**-.38****	**-.32***	**.33***	-
5000VLT	**-.30***	**-.36****	**.36***	-
UWLVLT	**-.29***	-	-	-
TotalVLT	**-.37****	**-.31***	**.34***	
	Use monolingual dictionary	learn words of idiom together	-	-
2000VLT	**.35***	**.40****	-	-
3000VLT	**.38***	**.37****	-	-
5000VLT	-	**.48****	-	-
UWLVLT	-	**.40****	-	-
TotalVLT	**.31***	**.44****		
	guess word meaning	Using Keyword method	-	-
2000VLT	**.35***	-	-	-
3000VLT	**.28***	**-.29**	-	-
5000VLT	-	**-.28**	-	-
UWLVLT	**.28***	-	-	-
TotalVLT	**.29***	-		
	Use English / Arabic dictionary	-	-	-
2000VLT	-	-	-	-
3000VLT	**-.28***	-	-	-
5000VLT	-	-	-	-
UWLVLT	-	-	-	-
TotalVLT				
	Arabic/ English dictionary	-	-	-
2000VLT	-	-	-	-
3000VLT	**-.32***	-	-	-
5000VLT	-	-	-	-
UWLVLT	**-.29***	-	-	-
TotalVLT	**-.30***			

Note ** p < .01; *p < .05

In terms of determination strategies, the strategy of *checking for L1 cognate* was negatively correlated with all levels of the VLT, as were *using English/ Arabic dictionary* with the *3000VLT* and *using Arabic/ English dictionary* with the *3000VLT*, the *UWLVLT* and the *TotalVLT*. However, *using monolingual dictionary* was positively correlated with the *2000VLT*, the *3000VLT* and the *TotalVLT*, as were *guessing meaning from context* with all levels of VLT except the *5000VLT* and *identifying part of speech* with the *TotalVLT*. Regarding social strategies, no statistically significant correlation was found between any of them and the VLT measure. For memory strategies, four correlations were observed: *paraphrasing the meaning of the word* was negatively correlated with the *3000VLT*, the *5000VLT* and the *TotalVLT*, as was using the *Keyword method* with the *3000VLT*, and the *5000VLT*. On the other hand, the strategy of *learning words of an idiom together* had a significantly positive correlation with all VLT frequency levels; as was *using the new word in sentences* with the *3000VLT*. Two other correlations were obtained between two cognitive strategies and VLT scores: *making own lists of words* was positively correlated with all the VLT levels except the *UWLVLT*, whereas *keeping vocabulary notebook* was negatively correlated with the *2000VLT*. Finally, we obtained only one metacognitive strategy (*reading English newspapers*) that positively correlated with the *3000VLT*, the *5000VLT* and the *TotalVLT*.

With respect to group B (GB) respondents, we obtained some weak to moderate but still significant correlations between the VLS they use and their vocabulary knowledge, as shown in table 5.5.1b below.

Table 5.5.1b: Correlations between VLS and VLT (Group B).

Strategy→ VLT levels↓	Determination Strategies	Social Strategies	Memory Strategies	Cognitive Strategies	Metacognitive Strategies
	identify part of speech	ask classmate for meaning	study sound of the word	take notes in class	listen to radio programs
2000VLT	-	**-.35***	-	**.28***	-
3000VLT	-	-	-	**.47****	**.29***
5000VLT	**.33***	**-.38****	**.32***	-	-
UWLVLT	-	**-.36****	-	-	-
TotalVLT	-	**-.35***	-	-	-
	-	-	Learn idiom	-	-
	-	-	words together	-	-
2000VLT	-	-	**.37****	-	-
3000VLT	-	-	**.32****	-	-
	-	-		-	-
	-	-		-	-
	-				
	-	-	make image of	-	-
	-	-	word form	-	-
2000VLT	-	-	**.37****	-	-
3000VLT	-	-	**.36***	-	-
5000VLT	-	-	**.57****	-	-
UWLVLT	-	-	**.42****	-	-
TotalVLT			**.50****		

Note ** p < .01; *p < .05

Compared to five determination strategies for GA respondents, only one determination strategy (*Identifying part of speech*) was positively correlated with the *5000VLT* for GB respondents. On the other hand, the social strategy of *asking classmate for meaning* was negatively correlated with all levels of the VLT except the *3000VLT*. Three memory strategies were positively correlated with some VLT levels: *studying the sound of the word* with the *5000VLT*; *learning words of an idiom together* with both the *2000VLT* and the *3000VLT*; *making image of the form of the word* with all levels of the VLT. One cognitive strategy (*taking notes in class*) was found to be positively correlated with the *2000VLT* and the *3000VLT;* as was the metacognitive strategy of *listening to radio* with the *3000VLT*.

5.5.2. The relationship between VLS and CPA

Regarding the correlations between the VLS used by the respondents and their controlled productive knowledge of vocabulary (CPA), as illustrated in table 5.5.2a below, 14 significant correlations were found between the five categories of VLS and the CPA as far as GA respondents are concerned.

Table 5.5.2a: Correlations between VLS and CPA (Group A)

Strategy→ VLT levels↓	Determination Strategies	Memory Strategies	Cognitive Strategies	Metacognitive strategies
	English/Arabic dictionary	paraphrase word meaning	Writing word many times	use computer programs
2000CPA	-	**-.32***	-	**.37****
3000CPA	-	**-.39***	**-.28***	**.31****
5000CPA	-	-	-	**.34****
UWLCPA	**-.33***	-	-	**.28***
TotalCPA	**-.28***	**-.34***	-	**.38****
	monolingual dictionary	learn idiom words together	keep vocabulary notebook	Read English newspapers
2000CPA	**.28***	**.40****	-	-
3000CPA	**.34***	**.37****	**-.3***	**.31***
5000CPA	**.28***	**.39****	-	-
UWLCPA	-	**.29***	**-.42****	-
TotalCPA	**.34***	**.42***	**-.35****	-
	guess word meaning	use scales for adjectives	Make own lists of words	-
2000CPA	**.32***	-	-	-
3000CPA	-	**-.32***	**.27***	-
5000CPA	-	-	-	-
UWLCPA	-	**-.32***	-	-
TotalCPA	**.30***	**-.28***	-	-
	Identify part of speech	-	Take notes in class	-
2000CPA	-	-	-	-
3000CPA	**.30***	-	**-29***	-
5000CPA	-	-	-	-
UWLCPA	-	-	-	-
TotalCPA	**.30***	-	**-28***	-
	Break word up into main parts	-	-	-
2000CPA	**-.28***	-	-	-
3000CPA	-	-	-	-
5000CPA	-	-	-	-
UWLCPA	-	-	-	-
TotalCPA	-	-	-	-

Note ** p < .01; *p < .05

Five determination strategies were correlated with some CPA levels: *using English/Arabic dictionaries* was negatively correlated with the *UWLCPA* and the *TotalCPA*, as was *breaking word up into main parts* with the *3000CPA*. On the other hand, *using monolingual dictionaries (English/English)* was positively correlated with all the CPA levels except the *UWLCPA*, as were *guessing meaning from context* with the *2000CPA* and *identifying part of speech* with the *3000CPA* and the *TotalCPA*. Moreover, three correlations were observed between the memory strategies and the CPA levels: *paraphrasing the meaning of the word* had significantly negative correlations with the *2000CPA*, the *3000CPA* and the *TotalCPA*, as did *using scales for gradable adjectives* with the *3000CPA*, the *UWLCPA* and the *TotalCPA*. However, *learning words of an idiom together* was positively correlated with all the CPA levels. Regarding the cognitive strategies, four correlations (3 negative and 1 positive) were observed with some CPA levels: the negative correlations included the strategies of *writing the word many times* with the *3000CPA*; *keeping vocabulary notebook* with the *3000CPA*, the *UWLCPA* and the *TotalCPA*; *taking notes in class* with the *5000CPA* and the *TotalCPA*. The positive correlation was between *making own word lists* and the *3000CPA*. For metacognitive strategies, *using computer programs* had significantly positive correlation with all the CPA levels, as was *reading English newspapers* with the *3000CPA* as shown in table 5.5.2a above.

Compared to the 14 correlations between the VLS and the CPA scores for GA respondents, we achieved fewer correlations (only four) for GB respondents, as shown in table 5.5.2b below.

Table 5.5.2b: Correlations between VLS and CPA (Group B)

Strategy→ VLT levels↓	Determination Strategies	Social Strategies	Memory Strategies
	identify part of speech	ask classmate for meaning	make image of the word form
2000CPA	-	**-.49****	-
3000CPA	-	**-.34***	**.45****
5000CPA	-	-	**.46***
UWLCPA	**.29***	-	**.45****
TotalCPA	-	**-.36****	**.44****
	-	Discover meaning	-
	-	in group work	-
2000CPA	-	**-.29***	-

Note ** p < .01; *p < .05

Only one out of nine determination strategies (*identifying part of speech*) had a weak positive correlation with the *UWLCPA*. Two social strategies were negatively correlated with the CPA: *asking classmate for meaning* with the *2000CPA*, the *3000CPA* and the *TotalCPA*; *discovering meaning through group work* with the *2000CPA*. On the other hand, the memory strategy of *making image of the form of the word* was positively correlated with all the CPA levels except the *2000CPA*. Regarding cognitive and metacognitive strategies, no statistically significant correlation was observed between any of them and the CPA levels.

5.5.3. The relationship between VLS and FPA

Regarding GA respondents, we obtained 10 VLS that either correlated positively or negatively with the 1st topic (parts of the body), the 2nd topic (learning and teaching English) and/or the Total score. Table 5.5.3a below shows these correlations.

Table 5.5.3a: Correlations between VLS and FPA (Group A).

	Determination Strategies	Social Strategies	Memory Strategies	Metacognitive Strategies
	identify art of speech	Ask teacher for paraphrase	Study part of speech	use computer programs
1st topic	**.46****	-	-	**.34***
2nd topic	-	**-.32***	**.30***	-
Total score	**.33****	-	**.34***	-
	Use monolingual dictionary	Ask for a sentence including word	learn words of idiom together	skip the new word
1st topic	**.30***	**.28***	**.36****	-
2nd topic	-	-	-	**.28***
	guess meaning	-	-	-
1st topic	-	-	-	-
2nd topic	-	-	-	-
Total score	**.27***	-	-	-
	Use English/Arabic dictionary	-	-	-
1st topic	**-.29***	-	-	-

Note ** p < .01; *p < .05

Regarding determination strategies, *identifying part of speech* was found to be positively correlated with the *1st topic* and the *Total score*, as were *using monolingual dictionary* with the *1st topic* and *guessing meaning from context* with the *Total score*. The *2nd topic* was correlated with only three VLS: one negative correlation with the social strategy of *asking teacher for paraphrase*, and another two positive correlations with the metacognitive strategy of *skipping the new word* and with the memory strategy of *studying part of speech* which was correlated with the *Total score* as well. For the *1st topic*, it was also positively correlated with the social strategy of *asking teacher for a sentence including the new word*, with the memory strategy of *learning words of an idiom together* and with the metacognitive strategy of *using computer programs*.

Compared to GA respondents, again fewer (5) correlations were observed between the VLS and the FPA scores with respect to GB respondents. As shown in table 5.5.3b, no statistically significant correlations were observed between any cognitive or metacognitive strategies with the FPA scores.

Table 5.5.3b: Correlations between VLS and FPA (Group B)

	Determination Strategies	Social Strategies	Memory Strategies
	guess word meaning	ask classmate for meaning	study the word sound
1st topic	**.32***	**-.32***	-
2nd topic	**.34***	**-.29***	**.34***
Total score	**.36****	**-.34***	-
	-	-	learn words of idiom together
	-	-	
1st topic	-	-	**.35***
	-	-	
	-	-	
	-	-	make image of word form
	-	-	
1st topic	-	-	**.56****
2nd topic	-	-	**.33***
Total score	-	-	**.48****

Note ** p < .01; *p < .05

The determination strategy of *guessing meaning from context* was positively correlated with the three FPA scores as was the memory strategy of *making image of the form of the word.* On the other hand, the social strategy of *asking classmate for meaning* was negatively correlated with the three scores. Some other memory strategies were positively correlated with the FPA scores: *study the sound of the word* with the *2nd topic*; *learning words of an idiom together* with the *1st topic*; *making image of the form of the word* with the three scores.

5.5.4. Summary of correlations between vocabulary knowledge and VLS

With respect to GA respondents, we obtained some statistically significant correlations between VLS and various elements of VLT, CPA and FPA distributed as follows:

- Determination strategies: *checking for L1 cognate* and *using Arabic/ English dictionary* were negatively correlated with the VLT, as were *using English/Arabic dictionary* with the three measures (VLT, CPA and FPA) and *breaking word up into main parts* with the CPA; *using monolingual dictionaries* and *guessing meaning from context* were positively correlated with the three measures, as was *identifying part of speech* with the three measures.
- Social strategies: *asking teacher for paraphrasing meaning* and *for a sentence including the new word* were negatively correlated with the FPA.
- Memory strategies: *paraphrasing the meaning of the word* was negatively correlated with the VLT and the CPA, as were *using scales for gradable adjectives* with the CPA and *using the keyword method* with the VLT; *learning words of an idiom together* was positively correlated with the three measures as was *studying part of speech* with the FPA.
- 3 cognitive strategies were negatively correlated with vocabulary knowledge: *writing word many times* with the CPA; *keeping vocabulary notebook* with the VLT, and the CPA; *taking notes in class* with the CPA. On the other hand, *making own word lists* was positively correlated with the VLT and the CPA.
- Metacognitive strategies: *using computer programs* was positively correlated with the CPA and the FPA; as were *reading English newspapers* with the VLT and the CPA, and *skipping the new word* with the FPA.

Compared to GA, for GB respondents we obtained fewer correlations between VLS and the VLT, CPA, and FPA elements, distributed as follows:

- Determination strategies: *identifying part of speech* was positively correlated with the VLT and the CPA; as was *guessing meaning from context* with the FPA.
- Social strategies: *asking classmate for meaning* was negatively correlated with the three measures (VLT, CPA and FPA); as was *discovering meaning through group work* with the CPA.
- Memory strategies: *making image of the form of the word, studying the sound of the word* and *learning words of an idiom together* were positively correlated with the three measures.
- Cognitive strategies: *taking notes in class* was positively correlated with the VLT.
- Metacognitive strategies: *listening to radio* was positively correlated with the VLT.
- No statistically significant correlations were found between any strategy of the categories of cognitive and metacognitive strategies and any of the CPA and FPA word frequency levels for GB respondents.

5.6. Multiple Regression Analysis

To make the picture of the relationship between VLS and vocabulary knowledge clearer, a multiple regression analysis was utilized. All the 44 VLSQ items were entered in five blocks representing the five categories of VLS: determination strategies (DET), memory strategies (MEM), social strategies (SOC), cognitive strategies (COG) and metacognityive strategies (MET) and were subjected to a multiple regression analysis against the three measures of vocabulary knowledge: VLT, CPA and FPA as shown in tables 5.6.1, 5.6.2, and 5.6.3 below.

With respect to group A (GA) respondents, three VLS were found to be significant predictors of the students' VLT (table 5.6.1a). The best predictors of the VLT were respectively the strategies of *learning words of idiom together, making own lists of words* and *identifying part of speech*. As for group B (GB) respondents, four VLS were found to be significant predictors of the VLT. The best predictor was the strategy of *making image of the form of the word*, followed by *taking notes in class*. On the other hand, *asking classmate for meaning* was the only predictor with negative effect on VLT for GB student as shown in table 5.6.1b.

Table 5.6.1a: Multiple Regression: Predictors of VLT (Group A).

VLS Category	Variables Entered	Beta Entered	T	p	R Square
DET	Identify part of speech.	**.217**	**2.079**	**.044**	**.338**
MEM	Learn words of idiom together.	**.310**	**3.631**	**.012**	**.382**
COG	Make own lists of words.	**.271**	**2.606**	**.012**	**.243**

Note p < .01; p < .05

Table 5.6.1b: Multiple Regression: Predictors of VLT (Group B).

VLS Category	Variables Entered	Beta Entered	T	p	R Square
SOC	Ask classmate for meaning.	**-.150**	**-2.261**	**.029**	**.180**
MEM	Make image of the form of the word.	**.161**	**2.064**	**.047**	**.327**
COG	Take notes in class.	**.142**	**2.513**	**.016**	**.237**

Note p < .01; p < .05

With regard to the predictors of the students' CPA, *learning words of idiom together, identifying part of speech* and *making own lists of words* again identified as the best predictors of the CPA for GA respondents; another positive predictor of the CPA was *using computer programs*. On the other hand, *keeping vocabulary notebook* appeared to

have negative effect on CPA, see table 5.6.2a. Regarding GB respondents, only two weak predictors of their CPA were observed: *making image of the form of the word* was a positive predictor, whereas *asking classmate for meaning* was a negative predictor of their CPA, as shown in table 5.6.2b.

Table 5.6.2a: Multiple Regression: Predictors of CPA (Group A).

VLS Category	Variables Entered	Beta Entered	t	p	R Square
DET	Identify part of speech.	**.082**	**2.073**	**.044**	**.310**
MEM	Learn words of idiom together.	**.110**	**2.547**	**.015**	**.390**
COG	Make own lists of words.	**.077**	**2.057**	**.045**	**.279**
	Keep vocabulary notebook.	**-.077**	**-2.157**	**.036**	
MET	Use computer programs.	**.095**	**2.390**	**.021**	**.237**

Note p < .01; p < .05

Table 5.6.2b: Multiple Regression: Predictors of CPA (Group B).

VLS Category	Variables Entered	Beta Entered	t	p	R Square
SOC	Ask classmate for meaning.	**-.065**	**-2.091**	**.043**	**.180**
MEM	Make image of word form.	**.106**	**3.248**	**.003**	**.287**

Note p < .01; p < .05

Concerning the FPA predictors, *asking for a sentence including the new word* was found to be the best predictor of the FPA for GA respondents. Other positive predictors included *analyzing available pictures, asking classmate for meaning, using computer programs* and *identifying part of speech* respectively. On the other hand, *using scales for gradable adjectives* appeared to be a negative predictor of the FPA, as was *analyzing available*

pictures, see table 5.6.3a. With respect to GB, *making image of the form of the word* was found to be the best predictor of the students' FPA; other positive predictors included *guessing meaning from context. Asking classmate for meaning* again emerged as a negative predictor of the FPA for GB respondents as illustrated in table 5.6.3b below.

Table 5.6.3a: Multiple Regression: Predictors of FPA (Group A)

VLS Category	Variables Entered	Beta Entered	t	p	R Square
DET	Identify part of speech. Analyze available pictures. Analyze available gestures.	.107 -.118 .142	2.041 -2.008 2.166	.048 .051 .036	.358
SOC	Ask classmate for meaning. Ask for a sentence including word.	.131 .161	2.299 2.364	. 026 .023	.257
MEM	Use scales for adjectives.	-.176	-2.766	.009	.424
MET	Use computer programs.	.109	1.985	.054	.235

Note p < .01; p < .05

Table 5.6.3b: Multiple Regression: Predictors of FPA (Group B)

VLS Category	Variables Entered	Beta Entered	t	p	R Square
DET	Guess meaning.	.150	2.083	.044	.224
SOC	Ask classmate for meaning.	-.121	-2.393	.021	.214
MEM	Make image of word form.	.183	3.214	.003	.400

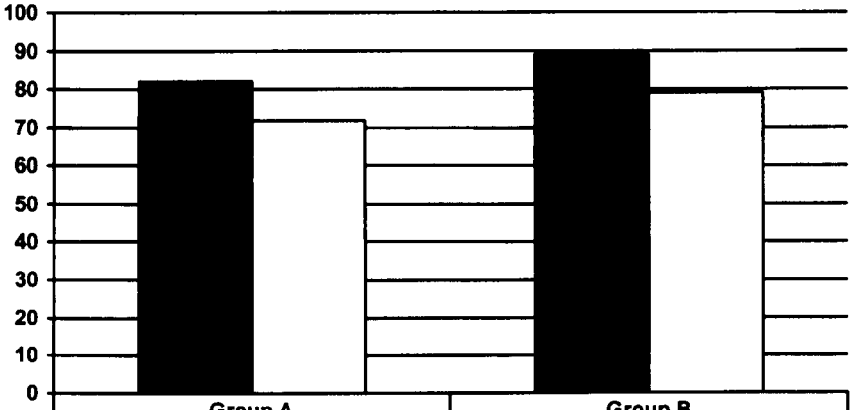
Note p < .01; p < .05

5.7. Analysis of the Motivation Test Scores

The motivation test analysis is based on 101 completed tests that were returned out of the 112 that were distributed to both groups (a response rate of 90%): group A (GA) based on 52 returned out of 56, and group B (GB) based on 49 returned out of 56. The maximum

score for both motivation tests (integrative and instrumental) is 28 (7 scores multiplied by 4 items). The first point to establish is that most of both motivation test scores were very high. The minimum integrative score for GA respondents was 11, the maximum 28 and a mean of 23 compared to GB's minimum of 18, maximum of 28 and mean of 25. The minimum instrumental score for GA respondents was 8, the maximum 28 and a mean of 20, whereas GB respondents achieved a minimum of 10, a maximum of 28 and a mean of 22. In addition, the Total scores for GA students for both types of motivation were a minimum score of 26 out of 56, a maximum of 54 and a mean of 43 compared to GB' s minimum of 37, maximum of 56 and a mean of 47. Figure 5.7 below shows mean percentages for the two types of motivation.

Fig. 5.7. Mean percentages of motivation types



	Group A	Group B
■ Integrative	82	89
□ Instrumental	72	79

5.7.1. Relationship between Motivation and vocabulary knowledge

Typically the strength of significant correlations in L2 motivation studies ranges between 0.30 to 0.50 (Dornyei, 2001, p. 8). As a matter of fact, only a few weak correlations were viewed between learners' motivation to learn English, particularly group A (GA), and their vocabulary knowledge measured through (VLT, CPA and FPA). Five weak positive correlations were observed between *integrative motivation* and the VLT levels, as shown

in table 5.7.1a.

Table 5.7.1a: Correlations between VLT and motivation (GA Subjects=52; GB Subjects=49)

Motivation Test →	Integrative Test	
Word Levels↓	GA	GB
2000VLT	.31*	.19
3000VLT	.33*	.28*
5000VLT	.30*	.03
UWLVLT	.29*	.05
TotalVLT	.34*	.18

Note ** p < .01; *p < .05

Moreover, only two weak correlations were observed between GA's *integrative motivation* and the FPA elements, as illustrated in table 5.7.1b. On the other hand, no statistically significant correlations were found to exist between any of the CPA levels and either of motivation tests for both groups.

Table 5.7.1b: Correlations between FPA and motivation (GA Subjects=52; GB Subjects=49)

Motivation Test →	Integrative Test	
FPA scores↓	GA	GB
1st topic	.30*	.09
Total score	.34*	12

Note: **Significant at p < .01; *Significant at p < .05

5.7.2. Relationship between Motivation and VLS

Similarly, only few correlations were found between both groups' motivation to learn English and their use of VLS (9 for GA and 8 for GB). For GA respondents, none of the nine correlations observed included any correlations with integrative motivation. *Instrumental motivation* was positively correlated with three determination strategies: *breaking the word up into main parts* (r=. 29, p<.05), *using English/Arabic dictionary* (r=.34, p<.05), and *using Arabic/English dictionary* (r=.30, p<.05). One social strategy (*asking classmate for meaning*) had a moderate positive correlation with *instrumental motivation* (r=.49, p<.01) and with the *Total* (r=.40, p<.01), as did one cognitive strategy

(*use written repetition*) with *instrumental motivation* (r=.54, p<.01) and with the *Total* (r=.41, p<.01). Moreover, two memory strategies were positively correlated with motivation: *study spelling* with *instrumental motivation* (r=.36, p<.01) and with the *Total* (r=.32, p<.05), *and using scales for gradable adjectives* with the *Total* (r=.34, p<.05). Finally, two metacognitive strategies were also positively correlated with motivation: *revising word soon after meeting* with *instrumental motivation* (r=.27, p<.05) and *continuing to study word* with *instrumental motivation* (r=.28, p<.05) and with the *Total* (r=.30, p<.05) as illustrated in table 5.7.2a below.

Table 5.7.2a: Correlations between Motivation and VLS (Group A).

	Determination Strategies	Social Strategies	Memory Strategies	Cognitive Strategies	Metacognitive Strategies
	break word into parts	ask classmate for meaning	study spelling	use written repetition	Revise soon after meeting
Integrative	-	-	-	-	-
Instrument	**.29***	**.49****	**.36****	**.54****	**.27***
Total	-	**.40****	**.32***	**.41****	-
	English/Arabic dictionary	-	use scales for adjectives	-	Continue to study word
Integrative	-	-	-	-	-
Instrument	**.34***	-	-	-	**.28***
Total	-	-	**.34***	-	**.30***
	Arabic/English dictionary	-	-	-	-
Integrative	-	-	-	-	-
Instrument	**.30***	-	-	-	-
Total	-	-	-	-	-

Note ** p < .01; *p < .05

Interestingly, unlike GA respondents where all correlations found were with *instrumental motivation*, all GB's correlations except two were with *integrative motivation*. One determination strategy (*breaking the word up into main parts*) was positively correlated with *integrative motivation* (r=.37, p<.05) and with the *Total* (r=.45, p<.05), as was one memory strategy (*learn the words of an idiom together*) with *integrative motivation* (r=.

34, p<.05), *instrumental motivation* (r=.30, p<.05) and with the *Total* (r=.59, p<.01). Furthermore, two social strategies had fairly strong positive correlations with motivation, especially with the *Total* score: *asking for L1 translation* with the *Total* (r=. 70, p<.01), and *asking for a sentence including the new word* with *integrative motivation* (r=.38, p<.01), *instrumental motivation* (r=.45, p<.01) and with the *Total* (r=.64, p<.01).

With respect to cognitive and metacognitive strategies, two other positive correlations were observed between these strategies and the learners' motivation. The cognitive strategy of *making own lists of words* was positively correlated with *integrative motivation* (r=.45, p<.01), and with the *Total* (r=.56, p<.01) as was *taking notes in class* with *integrative motivation* (r=.41, p<.01). The metacognitive strategy of *revising word soon after meeting* was positively correlated with *integrative motivation* (r=.32, p<.05) and *continuing to study word* with *integrative motivation* (r=.45, p<.05) and with the *Total* (r=.53, p<.05) as shown in table 5.7.2b below.

Table 5.7.2b: Correlations between Motivation and VLS (Group B).

	Determination Strategies	Social Strategies	Memory Strategies	Cognitive Strategies	Metacognitive Strategies
	Break word into parts	ask for translation	learn idiom words together	Make own list of words	Revise soon after meeting
Integrative	**.37***	-	**.34***	**.45****	**.32***
Instrument	-	-	**.30***	-	-
Total	**.45***	**.70****	**.59****	**.56****	-
	-	Ask for	-	take notes in	Continue to
	-	sentence	-	class	study word
Integrative	-	**.38****	-	**.41****	**45***
Instrument	-	**.45****	-	-	-
Total	-	**.64****	-	-	**.53***

Note ** p < .01; *p < .05

5.8. Chapter Summary

This chapter presented the results of the subjects' vocabulary knowledge measured by three vocabulary tests: VLT, CPA and FPA. The results show that students achieved very low scores in all word frequency levels of the VLT and CPA; the learners' scores for the VLT were about as twice as high as their scores for the CPA. Their scores were also relatively low in the FPA test. Although both groups' scores were low, GA learners' scores were significantly higher than those of GB learners. Examining the relationship between the elements of VLT, CPA, and FPA shows that there were strong positive correlations among the levels of the three dimensions of vocabulary knowledge. This chapter proceeded to present the relationship between the students' vocabulary knowledge and the VLS they use, described in the previous chapter. 23 (from the five categories of VLS) out of the actual 44 VLS were found to have correlations with the students' various levels of vocabulary knowledge. Finally, it analysed the motivation test scores and their relation to the subjects' VLS and vocabulary knowledge where a few weak positive correlations were viewed.

CHAPTER SIX

Discussion

6.1. Introduction

This chapter discusses the findings of the current study, starting with the vocabulary learning strategies questionnaire (VLSQ) that covers the range and frequency of use of vocabulary learning strategies (VLS) used by the Libyan majors of English at university level and then proceeding to the results of the vocabulary tests (VLT, CPA, and FPA) utilized to measure those learners' receptive, controlled productive and free productive vocabulary knowledge respectively. This will be followed by discussion of the relationship between the learners' vocabulary knowledge and the VLS they use.

The VLS will be discussed in terms of the two broader categories of (1) discovery strategies and (2) consolidation strategies as described in Chapter two, Section 2.2.1.3. Reference lists of all the strategies are provided in five tables to which the numbering of tables refers. As mentioned earlier in Chapter 3, Section 3.8.2 regarding interview analysis, when providing quotations, interviewees' initials will be used plus numbers 1, 2, or 3 that indicate which group of interviewees: Group 1 represents the high vocabulary knowledge (HVK) students; group 2 moderate vocabulary knowledge (MVK) students and Group 3 low vocabulary knowledge (LVK) students. Quotations originally in Arabic were translated into English, written in italics and put in brackets; quotations in English were put in quotation marks. Finally, the relationship between the learners' motivation to learn English, their vocabulary knowledge and the VLS they use will complete this chapter. As a reminder, table 3.6 above, page 92 shows the research questions to be answered by different instruments of data collection.

6.2. Range and Frequency of Use of VLS: RQ1&2.

6.2.1. Discovery Strategies

The most frequently used of all strategies by both groups (group A (GA) and group B (GB)) of the Libyan EFL learners of English were the two discovery strategies of using bilingual dictionaries (English/Arabic) and guessing meaning from context (see table 4.3, page 109). These results are congruent with the results of Schmitt's (1997) and Gu and Johnson's (1996) studies which showed that the strategies of guessing from reading context and using bilingual dictionaries were frequently used by their Japanese and Chinese learners of English respectively. Bilingual dictionaries are used most often by the Libyan EFL learners because they are available almost everywhere and easy for the learners to use, as they indicated in the interviews. The high response scale of use of English/Arabic dictionaries indicates that learners, in general, used those types of dictionaries frequently; yet, differences between student interviewees were observed in terms of ways of use (see Section 4.3.5, page 114). While high vocabulary knowledge (HVK) students reported that they used bilingual dictionaries when they could not understand the meaning of a new word after consulting other reference sources like guessing or monolingual dictionaries, moderate vocabulary knowledge (MVK) and low vocabulary knowledge (LVK) students usually use English/Arabic dictionaries immediately after they come across a new word; they indicated that it is easier and faster compared to using a monolingual dictionary.

These differences could be attributed to HVK students having more vocabulary knowledge that helped them make use of other strategies such as guessing meaning from context and monolingual dictionaries which require certain vocabulary knowledge to be used successfully as Laufer (1997b) suggested that knowledge of about 3000 word

families is a prerequisite for making a successful guess. HVK are more conscious about managing and planning their learning (metacognitive strategies), i.e. they would try various strategies in sequence on each unknown word as Scholfield (1999) suggested that dictionary use should not be used as an alternative, rather "strategies can be used in sequence on the same lexical problem" (p. 18). In doing so, they would use more appropriate strategies for getting the meaning and learning the new word in the long run. This parallels Bahrick's (1984) suggestion that learning something well depends on how deeply people process it. On the other hand, MVK and LVK students would look for the easiest way for getting the meaning, i.e. the bilingual dictionary without thinking of any other possible strategies.

The frequent use of guessing from context (see table, 4.3, page 109) can be attributed to the fact that the learners as English majors always face enormous number of unknown words while reading or listening in and out of class. Some HVK learners reported that they had successfully used guessing; this is reasonable since making a successful guess requires good knowledge of vocabulary, especially in the higher frequency levels like the 2000 and 3000 word level as Laufer (1997b) claims that learners should have a vocabulary knowledge of 3000 word families to help them guess successfully. However, in general their knowledge about guessing is superficial, i.e. they are not familiar with how to use different contextual clues, (as described in Chapter two, Section 2.2.1.4.1, page 33) that help them guess successfully. Rather guessing for them, especially the LVK learners, usually means stopping and reading the unknown word; whether they could or could not make a guess, they would eventually consult a dictionary.

One of the factors that would make learners uncertain of their guess and discourage using this strategy is that the Libyan EFL learners cannot use their L1 vocabulary knowledge in guessing since Arabic and English do not relate to each other. English belongs to the Germanic branch of the Indo-European family, while Arabic belongs to the Semitic languages family. Thus, it is not surprising that native Arabic speakers learning English ranked the discovery strategy of checking for L1 cognates (see table 4.3, page 109) among the least frequently used strategies simply because they have hardly any cognates to make use of.

Monolingual dictionaries were also frequently used by learners (see table 4.3, page 109), due to the fact that learners are majors of English who must be keen to obtain more new vocabulary through learning synonyms, and to improve the quality of learning through finding out the correct pronunciation as some interviewees indicated. In this respect, different opinions among student interviewees can be outlined as follows: HVK students thought that monolingual dictionaries helped them not only know more information about the newly learned words, but also acquire more vocabulary by being exposed to more synonyms. Since using this strategy requires an effort to understand meanings in L2 compared with bilingual dictionaries, this would help learners encode the newly learned words into the long-term memory, and this agrees with the literature suggestion that learning something well depends on how deeply people process it (Bahrick, 1984). This also indicates HVK learners' awareness of the importance of learning different meanings and uses of the new words and this can be obtained by using monolingual dictionaries.

On the other hand, MVK students used monolingual dictionaries mainly for finding out pronunciation of words, whereas LVK students commented that using this type of

dictionaries is difficult and makes learning more complicated, meaning they do not find it easy to understand explanations in English; so they favour bilingual dictionaries over monolingual dictionaries. This certainly has to do with lack of vocabulary knowledge required for such LVK learners to enable them understand synonyms and explanations provided by monolingual dictionaries. So, it is necessary for less successful learners or learners with low vocabulary knowledge to develop their vocabulary knowledge, especially the higher frequency words, more explicitly through, for example, word lists in order to be able to get full advantage of a range of deep strategies like guessing and using monolingual dictionaries that require a certain knowledge of vocabulary (Laufer, 1998).

Interestingly, while using bilingual dictionaries (Arabic/English) is the least frequent discovery strategy for GA learners, it is a frequent strategy for GB learners. On the other hand, GA learners reported more frequent use of monolingual dictionaries than their GB counterparts (see table 4.3, page 109). This could indicate that GA's vocabulary knowledge is better than that of GB, as shown in the results of vocabulary tests (see Section 5.3, page 165). Moreover, differences among the three groups of interviewees are obvious from their responses to using Arabic/ English dictionaries (see Section 4.3.5, page 114). HVK students reported that they had never used this strategy, while some MVK and most of LVK students reported frequent use of it when involved in writing activities; some LVK students said that they think and write in Arabic first, then they translate from Arabic into English using Arabic/English dictionaries; this is certainly due to the fact that they do not have enough productive L2 vocabulary to express themselves in English. It also indicates that writing is ignored as a skill and writing activities were probably done out of class where teachers' focus is only on product instead of process.

This, of course, is done without any monitoring from teachers who should be familiar with how their students go about writing as an essential skill of language learning.

On the other hand, the two social strategies of asking the teacher for a sentence including the new word and asking teacher for translation (see table 4.4, page 120) were the least frequently used discovery strategies by both groups. One of the reasons behind this less frequent use of asking teachers could be that the learners as 4th year English majors should presumably have quite good knowledge of vocabulary that would enable them to understand meanings through other sources such as paraphrasing, giving synonyms, or analyzing available gestures. The infrequency of use of asking teachers also has to do with the style of study in the Libyan education system (teacher-centred) where learners still view themselves as passive human beings who respond to what they have received from their teachers. In addition, students tend not to be risk takers and are usually afraid of making mistakes before their classmates and this in turn discourages asking and/or speaking in English. Some LVK students said that they would like to ask but usually hesitated to do so, especially if they were suspicious they might be asking about a familiar word to other classmates. One LVK student (L3) said *(when I am suspicious that classmates may know the word I want to ask about, I feel shy of asking, so I never speak)*; speaking is a problem for them, another LVK student (S3) commented (*I am not confident enough to speak in English before students or the teacher*).

6.2.2. Consolidation Strategies

With regard to consolidation strategies, the two cognitive strategies of verbal and written repetition (see table 4.6, page 138) come at the top in terms of use by both groups. This frequent use could be attributed both to the ease of using them as rote strategies and to

learners being used to those strategies since they were in pre-college where the teacher makes the class repeat words aloud as a typical way of teaching pronunciation and introducing new words in Libyan schools, as described in Chapter 1, Section 1.3.2, and as some student interviewees reported. This agrees with the findings of Lawson and Hogben (1996), Gu and Johnson (1996) and Schmitt (1997) that repetition strategies were among the most frequently used strategies. This also confirms O'Malley and Chamot's (1990) suggestion that these strategies are so deeply rooted in learners' minds that learners resist giving them up to utilize other ones. It also indicates that the Libyan EFL learners may not have other alternatives to be used instead of or along with these rote strategies. Moreover teachers, as student interviewees reported, pay no attention to strategy training which plays a crucial role in developing language learning (Nation, 2001; Macaro, 2006). Wenden (1987) claims that "learner training remains a secondary concern in many second language classrooms" (p. 159).

The frequent use of the metacognitive strategy of watching English TV channels (see table 4.7, page 143) can be partly attributed to the fact that some learners like everybody are just watching TV for pleasure. Yet, some differences were observed between learners when they face new words while watching TV: some HVK and MVK students reported that they consult a dictionary when they face new words and proceed to write the new words down and revise them from time to time, whereas for LVK students the learning process does not go further than consulting a dictionary. So again there are differences between HVK and LVK learners in terms of strategy use as Reiss (1983) suggested that successful learners use more specific strategies. It also has to do with depth of information processing (Bahrick, 1984) with HVK learners seeming to devote more effort to vocabulary learning.

The memory strategies of studying spelling, studying the sound of the word and saying the new word aloud that particularly concentrate on the form of the word were frequently used strategies by both groups as well (see table 4.5, page 128). These findings are also in line with Schmitt's (1997) study findings that Japanese learners focus on the form of the word.

On the other hand, asking teachers to check accuracy of word lists was the least frequently used of all strategies for both groups (see table 4.4, page 120). This is in line with their infrequent use of making word lists. This infrequent use of making word lists could be attributed to these learners having passed this stage as 4th year students; they may think that they had better learn through exposure to L2 rather than using word lists as Laufer, (1997a) suggests. This may conflict their frequent use of repetition, but they can use their textbooks where they underline the new words and use the margins, so they repeat words in that. These findings are in line with Gu and Johnson's (1996) study that using word lists was one of the least frequently used strategies by the Chinese EFL learners.

Studying and practising meaning in groups was another infrequently used social strategy (see table 4.4, page 120). This infrequent use of social strategies is congruent with O'Malley and Chamot's (1990) findings that in general, learners' use of social strategies is extremely limited. This is an indicator of the Libyan EFL learners' unfamiliarity with group work. Generally speaking, the less use of social strategies could be attributed to the teaching methods employed in classroom or more precisely to the classroom practice. In traditional teacher-fronted classes that still characterize many EFL classrooms, learners are usually receptive, and do not talk only if they are called upon. Other factors such as

class size (40 or more) and learners' same linguistic background discourage the use of group work. Unfamiliarity with group work makes learners unaware of the benefits they can gain from peer feedback in terms of language learning. The student interviewees indicated that they do not work in groups in class; one HVK (F1) said (*I do not work in group I work for myself only*) she added "I have the ability and knowledge in my brain, how can I ask students". Her comments and exclamations clearly show that she is unaware of any benefits from studying in groups. Such learners need to work in groups so they can have full advantages of group learning as described by Dansereau (1988) that (1) group learning encourages active processing of information; (2) the social context motivates the participants to learn; (3) learning in groups can promote the team activities even outside the classroom; (4) due to less intervention from teachers, students have more opportunities to use language in class.

The least frequently used strategies included the memory strategies of using the Keyword method (see table 4.5, page 128). Its infrequent use by the Libyan EFL learners is in line with the findings of some studies such as O'Malley et al. (1985), Chamot et al. (1987), Schmitt (1997) and Al-Fuhaid (2004). Most of the student interviewees said "we do not know this strategy"; while some others commented "it is complicated and difficult to understand". Their lack of use of this method is reasonable because they were unaware of it as they reported.

The Libyan EFL learners also reported infrequent use of word-related strategies such as associating the word with its coordinates, connecting the word to its synonyms and antonyms, and using scales for gradable adjectives (see table 4.5, page 128). This finding is congruent with those of Lawson and Hogben (1996) and Schmitt (1997). Lawson and

Hogben (1996) used different research methods from the current study and from Schmitt's; they used think aloud protocols to identify the VLS used by 15 Australian learners while learning twelve new words in the Italian language. This confirms the less frequent use of such mnemonic strategies regardless the context and the language learned. Such learners seem to deal with the new word as an end in itself rather than connecting it with other related words like synonyms or coordinates that are helpful in facilitating the meaning retention process for them. Lawson and Hogben (1996) claims that deliberate mnemonic strategies although infrequently used by the learners were more effective for recall than repetition and word feature analysis strategies.

Regarding the metacognitive strategies, excluding the strategy of watching English TV channels, the other eight strategies were generally infrequently used especially by GA learners (see table 4.7, page 143). Assessing vocabulary knowledge was the least used metacognitive strategy by both groups of learners. In general, students tended to assess their vocabulary knowledge only when they study for reading comprehension modules that explicitly ask about vocabulary in exams and this is usually done by writing the words down to make sure of spelling or sometimes asking each other questions such as "what does this word mean?", There is usually no plan for assessing vocabulary through which learners can realize how effective the strategies they have been using and whether they can adopt other more effective strategies.

Skipping the new word (see table 4.7, page 143) is also an infrequently used strategy. The Libyan EFL learners did not seem to skip or pass any unknown word regardless of the context in which it occurs, as most student interviewees reported. Only one HVK student reported using this strategy saying: "while reading a story or literature, I do not waste my

time looking for a word, I just neglect it, and if this word faced me many times I look for it" meaning look it up in dictionary. This infrequent use indicates that these learners do not know which words can be skipped, particularly the low frequency words that may not be seen again. Thus, teachers should raise their learners' consciousness of some factors that should be taken into their consideration when they decide to learn or to skip an unknown word as Nation (1990) suggests (see Section 2.2.1.4.2, page 41).

Generally speaking, the Libyan EFL learners' infrequent use of metacognitive strategies indicates that most of these learners do not have plans or directions for their learning which are important for success, as O'Malley and Chamot (1990) suggested (see Section, 2.2.1.4.2, page 40). It also indicates that learners are not independent in their learning and lack the knowledge of what to learn about words. Most of them, especially MVK and LVK learners, rely only on class material. For example, one MVK student (F2) said (*I rely on class material, but if I watch a movie sometimes a strange word attracts my attention so I look it up in dictionary*). These findings are consistent with those of Moir and Nation (2002) who discovered that their subjects were not responsible for their learning and unaware of what learning vocabulary should require. Such students should be more independent in their learning through "learner training", see Chapter 2, Section 2.3.3.1, page 50, for guidelines for systematic training. Moir and Nation (2002) suggested that learners should be more independent, aware of their learning strategies and able to accomplish the learning in order to solve their learning problems.

6.2.3. Summary of the answers to RQ1 and 2.

To sum up the answer to RQ1 and RQ2, in general the Libyan EFL learners in both groups reported a relatively low average use of VLS. None of the five categories get

much above 50 in scale responses. This could be due to that all categories included a mixture of frequently and infrequently used strategies.

Learners reported using discovery strategies more frequently than consolidation strategies. One interpretation of this is that those learners seem to be more interested in discovering or understanding the meaning of new words than learning them. In other words, after finding out the meaning of a word, for example, by looking it up in a dictionary, no further actions such as taking notes of the new word are taken in order to learn it. This could be attributed to the fact that the Libyan English majors restrict themselves to the task they perform so during a reading activity, they just discover the meanings to understand the reading passage and/or to answer the comprehension questions. However, differences between HVK, MVK and LVK learners do exist in reported strategy use with HVK learners using more strategies for any single task and being more aware of what they should know about a word. This was illustrated by the ways of using some strategies such as using dictionary, guessing meaning, watching TV, and etc. by some student interviewees. This also agrees with research on VLS (e.g. Ahmed, 1989, Sanaoui, 1995).

By comparing the two groups in terms of strategy use, they to a great extent seem to be similar in terms of the rank order among VLS. For example, the determination strategies ranked highest and the social strategies lowest in terms of use by both groups. For more examples see Chapter 4, Section 4.8, page 152. Still, we should not simply argue that there is no difference between the two groups of learners. Instead we should consider Macaro's (2006) suggestions that differences in language learning strategies use exist between groups (e.g. Group A and Group B, or HVK, MVK and LVK in this study) as

well as individuals; the individual differences identified in the current study were in line with the findings of other studies (e.g. Naiman et al.,1996; Ahmed, 1989). Although the differences in strategy use between the two groups were not statistically significant in most cases, there were some unexpected significant differences in terms of mean scores. One major difference was found to be in using bilingual dictionaries (Arabic/English) that was very infrequently used by GA learners but very frequently used by GB learners; some possible explanations for this were discussed earlier in this Chapter, Section 6.2.1. Most importantly, the important thing would not be the difference between the two groups in absolute scores, as is the case here, so much as the difference in rank order between the strategies, and here there is hardly any difference.

The most frequently used strategies by the learners are largely congruent with their rating of the ten most helpful strategies, i.e. the strategies which were rated in the top 10 were also among the most frequently used strategies. This rating is in line with Schmitt's (1997) findings that the Japanese learners rated using dictionaries, guessing from context, studying spelling as well as written and verbal repetition as the most helpful strategies. On the other hand, no single strategy reported by the Libyan learners as infrequent was ranked among the ten most helpful (see tables 4.9.1a and 4.9.1b, pages 155-156). This suggests that these learners are unaware of the values of the other strategies which they do not use. Thus, explaining learning strategies explicitly is highly recommended for such learners who indicated when interviewed that they had never received any training in how to use VLS either inside or outside class.

6.3. Vocabulary knowledge: RQ3

Comparing the criterion mastery level of 87% used by Schmitt et al. (2001), as described on Chapter 2, Section 2.5.2, page 60, with the mean percentages of the Libyan EFL learners' vocabulary knowledge, we found that the mean percentages for the learners' receptive vocabulary knowledge at even the most frequent words (2000 VLT) of the VLT (64% for GA and 39% for GB) were to a great extent below the criterion mastery level; their achievement is much below the criterion mastery level in the lower frequency levels of VLT. Moreover, the results show very low mean percentages in all word frequency levels of the controlled productive vocabulary knowledge, for example, in the 2000CPA their mean percentages were 37% for GA and 19% for GB (see figures 5.3.3a and 5.3.3b, page 167 for all mean percentages). Although both groups' scores were low, GA learners' scores were higher than those of GB learners. In addition, other Mann-Whitney tests comparing the raw scores in each level of the VLT, CPA and FPA for both groups showed that these differences were highly significant, see appendix 12, page 297.

Learners' scores decline across frequency levels as we move from highest to lowest (see tables 5.3.1 and 5.3.2, pages 165-166). This is an anticipated result simply because learners normally face more high frequent words than low ones. This finding is congruent with other researchers' findings (Read, 1988; Nation, 1990; Schmitt et al., 2001). Comparing the mean scores for VLT and CPA (tables 5.3.1 and 5.3.2, pages 165-166), we found that learners' scores for receptive vocabulary knowledge were about as twice as high as their scores in the controlled productive knowledge; these findings are in line with those of Stoddard' (1929) and Waring (1997). The gap decreases as we move from highest to lowest frequency divisions: 27% for GA and 19% for GB in the 2000; 19% for GA and 9% for GB in the 3000; 17% for GA and 4% for GB in the 5000; 13% for GA

and 6% for GB in the UWL. The gap is also higher for GA scores than that for GB's mostly because the mean scores for GA are significantly higher than those for GB. These findings are congruent with Laufer and Paribakht's (1998) findings that the gap between receptive and productive vocabulary knowledge tends to be higher for learners with higher receptive vocabulary.

This gap between the VLT and the CPA could be attributed to the fact that learners could not efficiently use their receptive knowledge of vocabulary in productive situations when they were asked to. This could be because learners have few chances for using their receptive vocabulary productively, i.e. they are not used to communicate in L2 outside class where only Arabic is spoken or inside class where no group discussion activities employed; one MVK (F2) said (*I usually forget when I want to say some word in class that I already know in ordinary days*); two other LVK student interviewees (S3 and L3) indicated that speaking is problem for them; they commented respectively (*I am not confident enough to speak in English before students or the teacher*). (*I never speak*). This certainly indicates the lack of practice in speaking which would make the learners' receptive vocabulary inactive. These findings are in line with the literature as Henriksen (1999) suggests that the gap between the learners' receptive and productive vocabulary knowledge stems from the vague knowledge of the former which can lead to inefficient use of it in more productive situations.

Regarding learners' free productive knowledge measured by the FPA test, most of the learners' scores were also low considering the nature of this test where they could write as many words as possible related to specific topics. Unlike the 1st topic "parts of the body" in which learners were asked to write down the words they knew about a very

specific topic, in the 2nd topic "teaching and learning English" learners could use their imagination regarding what relates to this wide field, so we found variations between individuals in terms of number and word types they could supply (see Appendix 13, page 299). As a matter of fact, it was unexpected that learners would not do well even in such a test where they could provide as many words as possible related to two familiar topics. Still, there is diversity in scores (see table 5.3.4, page 167) that ranges from 3 to 37 in the 1st topic and from 2 to 40 in the 2nd topic, but when we look at the mean scores for both groups in both topics respectively (16 and 17 for GA; 12 and 10 for GB) it can be concluded that most scores are relatively low (see appendix 5c).

In general, the findings of the Libyan EFL learners' vocabulary knowledge partly fit with our hypothesis for the first part of RQ3 that the Libyan EFL learners lack the knowledge about even the high frequency words. The qualification with 'partly' is necessary because their vocabulary knowledge was expected to be limited but not so extremely limited, especially for GB learners. Those learners' receptive, controlled productive, and free productive vocabulary knowledge is considered very low taking into account that they are a final year English majors supposed to be teachers of English in a few months.

6.3.1. Relationship between Vocabulary Knowledge Elements: RQ3

The second part of RQ3 seeks information about the relationship between the Libyan EFL learners' vocabulary knowledge measured through three vocabulary tests: VLT, CPA and FPA. First, there are internal high positive correlations within all the elements of the VLT, CPA and FPA (see tables 5.4.1, 5.4.2, and 5.4.3, pages 169-170), except the one between the 2000CPA and the 5000CPA for GB which is not statistically significant (r = .20); this indicates that the frequency level divisions for the VLT and CPA are valid and

reliable measures of the students' vocabulary knowledge as have been proved by some researchers in other studies (Read, 1988; Beglar and Hunt, 1999; Schmitt et al., 2001). In other words, learners who did well in a lower frequency level (e.g. 3000 word level), could normally be assumed to have done well in a higher frequency level (e.g. 2000 word level) and vice versa (see appendix 7, page 280 for scores of student interviewees).

Second, there were significantly high positive correlations across all word frequency levels of the VLT and the CPA for GA learners compared to the weak to moderate correlations, but still significant, for GB learners (see table 5.4.4, page 171). Higher correlations were particularly viewed between the 3000 levels of VLT and CPA, the 5000VLT and the 3000CPA, and between the 2000 levels of VLT and CPA (.79, .75, .74 respectively) for GA. The Total scores of VLT and CPA had the highest correlation of .84. All these moderate to high positive correlations could be attributed to the fact that a learner who did well at one frequency level of CPA, could presumably have done well on the same frequency level of VLT or vice versa. In other words, learners with higher receptive vocabulary knowledge are also higher in productive knowledge and vice versa. This is in line with Laufer's (1998) and Laufer and Paribakht's (1998) findings that correlations are high between receptive and productive vocabulary, i.e. more proficient students in receptive vocabulary were more proficient in productive vocabulary as well.

More importantly, the FPA elements, especially the 1st topic, had moderate correlations with both VLT and CPA levels. Thus, learners with higher receptive and controlled productive vocabulary knowledge are also higher in free productive vocabulary knowledge. These correlations confirm the FPA validity and reliability as a measure of productive vocabulary size, since it correlates with widely used tests (VLT and CPA)

which were taken from published sources, as described in Chapter 3, Section 3.4.3, which have tested their reliability and validity. The highest correlations were between the *TotalVLT* and the *1st topic* of the FPA (r=.71, p<.01) for GB, and between the *2000CPA* and the *1st topic* (r=.65, p<.01) for GA; the lowest was (r=.31, p<.01) with both VLT and CPA levels for the two groups.

6.4. Relationship between VLS and vocabulary knowledge: RQ4

This section discusses the correlations between the Libyan EFL learners' vocabulary learning strategies (VLS) and their vocabulary knowledge. It begins with discussing the positive correlations and proceeds to discuss the negative correlations in both categories of discovery strategies and consolidation strategies respectively.

The findings show that 23 out of 44 VLS investigated in the VLSQ were significantly correlated with several elements of the three vocabulary knowledge dimensions (receptive, controlled productive, and free productive vocabulary knowledge), with more correlations identified for the higher levels of VLT and CPA, probably because learners' scores were higher in those levels compared with the lower levels. Those VLS correlated with receptive vocabulary knowledge were most often correlated with controlled productive and free productive vocabulary knowledge as well (see tables 5.5.1a, 5.5.1b, 5.5.2a, 5.5.2b, 5.5.3a, and 5.5.3b for all correlations among VLS and vocabulary knowledge). It is interesting to find out that the two groups (GA and GB) were not only inconsistent in terms of their frequency of use of VLS and their vocabulary knowledge, but also in term of which VLS related to their vocabulary knowledge. This again reconfirms to a great extent the differences between groups in terms of the VLS they use

as well as their vocabulary knowledge. Possible explanations of the two groups' differences will be provided later in Section 6.4.2, page 216.

6.4.1. Discovery strategies and vocabulary knowledge

With respect to the discovery strategies, *using monolingual dictionary* was positively correlated with the three dimensions of vocabulary knowledge (receptive, controlled productive, and free productive) for GA learners as was *guessing meaning from context* with both groups' three dimensions of vocabulary knowledge (see tables 5.5.1a, 5.5.1b; 5.5.2a and 5.5.2b; and 5.5.3a, 5.5.3b, pages 174-181). These findings are congruent with Gu and Johnson's (1996) findings. This could be attributed to the fact that both strategies require a certain level of vocabulary knowledge to be used efficiently as Laufer (1997b) stated that a learner should know about 95% of the words in a text in order to guess words successfully. This can explain the more frequent use of these strategies by the high vocabulary knowledge (HVK) learners than the moderate (MVK) and low vocabulary knowledge (LVK) learners, as mentioned earlier in this Chapter, Section 6.2.1. Thus, the learners with higher vocabulary knowledge are normally more successful and higher in terms of using monolingual dictionaries and guessing from context and vice versa.

On the other hand, *checking for L1 cognate* was found to have negative correlation with GA's receptive vocabulary as were *using bilingual dictionaries* (*English/Arabic* and *Arabic/ English*) with the three dimensions of vocabulary knowledge for GA learners and *breaking word up into the main parts* with GA's free productive vocabulary (see tables 5.5.1a, 5.5.2a and 5.5.3a, page 174-180). The negative correlation between the strategy of *checking for L1 cognates* and the learners' receptive vocabulary knowledge could be because Arabic and English do not belong to the same language family so native Arabic

speakers learning English have hardly any cognates to make use of. In this sense using cognates would not help the Libyan EFL learners develop their vocabulary acquisition.

The negative correlation between the use of English/Arabic dictionaries and learners vocabulary knowledge can be attributed to the fact that LVK learners use bilingual dictionaries more than their HVK and MVK counterparts (see Section 4.3.5, page 114). Regarding the negative correlation between using Arabic/English dictionaries and learners' vocabulary knowledge, it is also because the use of this strategy is mostly restricted to LVK learners who reported a frequent use of it (see Section 4.3.5, page 114). This is because LVK learners rely more on consulting bilingual dictionaries when involved in any activities, like reading where they rely on English/ Arabic dictionaries and/or writing where they depend on Arabic/ English dictionaries. They most often use bilingual dictionaries to compensate for their inefficiency of consulting other reference sources such as monolingual dictionaries and guessing from context in which good vocabulary knowledge is a prerequisite, as Laufer (1998) claims (see Section 6.2 in this Chapter).

Moreover, the social strategy of *asking classmate for meaning* was negatively correlated with some elements of the vocabulary knowledge in terms of reception, controlled production and free production, as were *discovering meaning through group work* with the controlled and free productive vocabulary knowledge for GB (see tables 5.5.1b, 5.5.2b; and 5.5.3b, pages 176-181) and *asking teacher for paraphrase of the new word* and for a *sentence including the new word* with the free productive vocabulary knowledge for GA (see table 5.5.3a, page 180). This means that the learners with low vocabulary knowledge are likely the ones who ask more for the meaning of words, taking into

consideration the limited use of social strategies by the Libyan EFL learners (see table 4.2, page 108) and by EFL learners in general (O'Malley and Chamot, 1990).

6.4.2. Consolidation strategies and vocabulary knowledge

Regarding consolidation strategies, the memory strategy of *learning words of an idiom together* had a significantly positive correlation with the three dimensions of vocabulary knowledge (receptive, controlled productive, and free productive) for both groups (excluding GB's controlled productive knowledge), as did *using the new word in sentences* with GA's receptive vocabulary knowledge (see tables 5.5.1a, 5.5.1b, 5.5.2a, and 5.5.3a, 5.5.3b, pages 174-181). Some interviewees said that learning idioms was helpful for them to be used together in communication; that idioms can be used as a mnemonic strategy that helps them learn and remember the constituent words to be used in other sentences (Schmitt, 1997). The memory strategy of *studying the sound of the word* was positively correlated with receptive and free productive knowledge for GB learners, as were *making image of the form of the word* with the three dimensions of vocabulary knowledge for GB learners (see tables 5.5.1b, 5.5.2b and 5.5.3b, pages 176-181) and *studying part of speech* with free productive knowledge for GA learners (see table 5.5.3a, page 180). This is in line with Gu and Johnson's (1996) findings that mnemonic devices were correlated with their Chinese EFL learners' vocabulary size.

With respect to cognitive strategies, *taking notes in class* (see table 5.5.3b, page 181) was found to be positively correlated with the receptive vocabulary knowledge for GB learners, as was *making own list of words* with the receptive and controlled productive knowledge for GA learners (see tables 5.5.1a and 5.5.2a, pages 174-177). The metacognitive strategy of *using computer programs* also had positive correlations with

controlled and free productive vocabulary knowledge, as did *reading English newspapers and magazines* with the receptive and controlled productive knowledge, *skipping the new word* with the free productive vocabulary knowledge for GA learners (see tables 5.5.1a, 5.5.2a and 5.5.3a, pages 174-180) and *listening to radio* (see table 5.5.1b, page 176) with the receptive vocabulary knowledge for GB learners. As mentioned earlier in Section 6.2.2 that the Libyan EFL learners did not seem to skip any unknown words. Yet, unlike unsuccessful learners, successful learners do skip words which they believe do not hamper their understanding of the context (Gu, 1994), as one HVK interviewee student mentioned (see this Chapter, Section 6.2.2). These findings are congruent with Gu and Johnson's (1996) findings that note-taking and the metacognitive regulation variables are positively correlated with the Chinese learners' vocabulary size.

On the other hand, the memory strategy of *using the Keyword method* was negatively correlated with GA learners' receptive knowledge (see table 5.5.1a, page 174). A possible explanation for this is that first, many student interviewees reported unfamiliarity with the Keyword method since they had received no training on how to use it; second, it was one of the least frequently used strategies by the respondents, as shown in table 4.5, page 128, due to its complexity as they reported; this is in line with O'Malley et al. (1985), Chamot et al. (1987), Schmitt (1997) and Al-Fuhaid (2004). Therefore, even learners who reported using it may need training in order to use it effectively. Moreover, the cognitive strategies of *writing the new word many times* and *keeping vocabulary notebook* were negatively correlated with receptive and controlled productive knowledge for GA learners as was *taking notes in class* with their controlled productive knowledge (see tables 5.5.1a and 5.5.2a, pages 174-177). This is congruent with Gu and Johnson's (1996) findings that

writing the new word many times had a negative correlation with the learners' vocabulary size.

The multiple regression results (see tables 5.6.1, 5.6.2, 5.6.3, pages 184-186) indicate that learners' vocabulary knowledge mostly relates to the learners' use of the discovery strategies of *identifying part of speech* and *analyzing available pictures* for GA learners as well as *guessing the meaning* for GB learners. As for consolidation strategies, their vocabulary knowledge seems to be related to their use of *learning words of idioms together* for both groups, *making own lists of words* for GA learners and *making image of the form of the word* for GB learners. Learners need to use these strategies to develop their receptive and productive vocabulary knowledge. These findings are in line with Steingart and Glock's (1979 cited in Schmitt, 1997) findings that imagery has proved to be effective in learning, but inconsistent with Gu and Johnson's (1996) that imagery encoding strategies were strong negative predictors of learners' vocabulary size. Also the findings of this study are unlike those of Gu and Johnson's (1996) in that metacognitive strategies seemed to be the best predictors of their learners' vocabulary size. In the current study no metacognitive strategy emerged as a positive predictor of the Libyan learners. This could be because of their low frequency use. On the other hand, *using scales for gradable adjectives* and *asking classmates for meaning* appeared to be the best negative predictors of learners' vocabulary knowledge; learners should not rely on them to develop their vocabulary knowledge.

In general, the results show that a range of vocabulary learning strategies were positively or negatively correlated with the Libyan EFL learners' vocabulary knowledge in terms of reception, controlled production and free production. The Libyan EFL learners'

vocabulary knowledge was positively and/or negatively correlated with both frequently (most often) and infrequently used VLS (see appendix 10, page 286); this indicates that the range of VLS used by the Libyan EFL learners rather than the frequency of use determines the correlations among VLS and vocabulary knowledge. In terms of the five categories of strategies, since metacognitive strategies were infrequently used by the learners, only four VLS (see tables 5.5.1a, 5.5.1b, 5.5.2a and 5.5.3a, page 174-180) under this category were positively correlated with the learners' vocabulary knowledge; moreover, social strategies (the most infrequently used by both groups) had even negative correlations with the learners' vocabulary knowledge.

There is usually consistency in that the VLS correlated with the learners' receptive vocabulary knowledge are also correlated with their controlled and free productive vocabulary knowledge. However, this does not apply to all correlations, i.e. the VLS that correlate with receptive vocabulary may not correlate to the same extent with controlled or/and free vocabulary knowledge. Thus, EFL/ESL learners are required to focus on a range of VLS, (e.g. group learning in classrooms, talking to native speakers, making own lists of words) that enhance their productive vocabulary knowledge as well as their receptive knowledge.

Finally, one interesting point to mention is that GB learners' mean scores were higher in VLS use than GA learners even though the difference is not statistically significant in most cases (see Appendix 11, page 289) as the Mann-Whitney test results showed. However, when it comes to vocabulary knowledge, their scores were significantly lower than their GA counterparts. This contradicts research findings that successful learners employ more strategies and use them more frequently than their unsuccessful

counterparts. As far as the two groups of the Libyan EFL learners are concerned, the following are some possible explanations for this:

- GB learners may have higher mean scores as they reported, but the problem usually has to do with the efficiency in using learning strategies, since research suggests that differences between less and more successful learners are more a matter of quality than quantity of learning strategies, as Reiss (1983) suggested. This might indicate that GA learners are more efficient in their use of VLS. This belief is based on the interviews data that indicates that HVK were more efficient in using VLS than MVK and LVK counterparts, suggesting it could successfully be applied to both groups of language learners too.
- One might argue that GB learners would like to satisfy the researcher's expectations by reporting more frequent use of VLS. However this is not the case as the researcher as a teaching member staff at university level has never worked in the department of English where GB learners study, on the contrary, he belongs to the GA learners' department of English even though he has not taught 1st year students, the stage of GA learners when the researcher left for his study. Moreover, before taking the VLSQ, both groups of learners were assured that their responses would be confidential and had nothing to do with the assessment of their academic study.
- Compared to GA, GB's department of English in Sabratha city is relatively new and used to have problems related to lack of teaching staff as A. Rabei (personal communication, March, 2006) (a colleague of mine and one of GB's teaching staff) reported. Moreover, since the city of Sabratha has less population than Zawia (the city where GA study) and the department of English in Sabratha is relatively new, having been established in 2000, the competition among GB

learners in terms of who get admitted after passing the admission test, is not so high, so there should be more flexibility in terms of admitting students to the department.

- Most importantly, the key thing would not be the difference between the two groups in absolute scores, as is the case here, so much as the difference in rank order between the strategies, and here there is hardly any difference.
- Differences among the two groups in terms of teaching methods do exist since they are taught by different teachers. Apart from qualifications (supposed to be qualified) teachers apply their own teaching methods and use their own materials (e.g. textbooks) which are likely to be different. This, of course, affects students' achievement.

To conclude this section, if I had happened to use only one group, I would have generalized saying that their behaviour is true for Arabic learners. By choosing two groups, originally just to increase numbers, the current study showed that variations between two groups of Arab learners in the same country, at the same university and the same level do exist in terms of strategy use and vocabulary knowledge. Thus, other researchers taking one group as typical of the whole country have to be careful about generalising because any other group would be different for a number of reasons, as we see in the points mentioned above. The implication is that since learners vary in their use of strategies, teachers should raise their learners' awareness of a range of strategies to satisfy their different expectations, as Meara (1993) suggests that textbooks should be based on multi-methods of vocabulary learning to satisfy different learners' expectations. He adds teachers should also encourage learners to take control of their learning and be more independent by using whatever suits them.

6.5. Motivation to Learn English: RQ5

Both groups of learners achieved high scores in both motivation tests: a mean score of 23/28 (82%) for GA and 25/28 (89%) for GB in integrative motivation; a mean score of 20/28 (72%) for GA and 22/28 (79%) for GB in instrumental motivation (see appendix 9). The high scores learners obtained in the motivation test could be attributed to the fact that the learners were English majors who should be highly motivated to learn the language of their choice, at least when they first joined the department of English. Compared with Cook's (2001) findings: above 70% to about 90% for integrative and around 70% for instrumental, these findings are higher.

6.5.1. Motivation in relation to Vocabulary Knowledge and VLS: RQ5

Because of the ceiling effect of all the motivation scores being high, by utilizing the Pearson Product Moment Correlation, only a few correlations were observed between learners' motivation and the scores of vocabulary knowledge tests as well as the VLS used by the respondents (see Chapter 5, tables 5.7.1a, 5.7.1b, 5.7.2a and 5.7.2b).

Regarding correlations between motivation and vocabulary knowledge, surprisingly, only integrative motivation was found to have weak, but still significant positive correlations (the highest was .33, $p<.05$) with the learners' receptive vocabulary knowledge measured by the VLT word levels mostly for GA learners (4 for GA and 1 for GB). It is also the integrative motivation that had other two weak positive correlations with the learners' free productive vocabulary knowledge measured by the FPA elements and again for GA learners only. However, no single CPA level that measures the learners' controlled productive vocabulary knowledge was found to be correlated with motivation.

On the other hand, the VLS used by GA learners were found to be positively correlated with their instrumental motivation with no single correlation observed with the integrative motivation. Interestingly, this is not the case for GB learners who had seven VLS positively correlated with the integrative motivation compared to two with instrumental motivation. This inconsistency of the relationships between motivation and learning outcomes is congruent with the literature that the relationships between learners' motivation and their L2 achievement are not stable and/or substantial (Gardner and MacIntyre, 1993).

As aforementioned, almost all learners' motivation scores were high, unlike the diversity in types and use of VLS and in scores for vocabulary knowledge. Although it is virtually impossible to determine precisely, we would cautiously suggest that there were a few and weak positive correlations between the Libyan EFL learners' motivation to learn English and their vocabulary knowledge and use of VLS. This to a certain extent is in line with research which proposes that highly motivated learners use more varieties of learning strategies and that "both integrative and instrumental motivations may lead to success, but lack of either causes problems" (Cook, 2001, p.118).

6.6. Chapter Summary

This chapter discussed the findings of the current study with respect to the vocabulary learning strategies (VLS) used by the Libyan majors of English at university level. It proceeded to discuss their results on three vocabulary tests (VLT, CPA, and FPA) which measured the learners' vocabulary knowledge in terms of reception, controlled production and free production. Then it discussed the learners' use and frequency of VLS in relation to their vocabulary knowledge. Finally, it ended with exploring the relationship between

the learners' motivation to learn English, their VLS and their vocabulary knowledge. Table 6.6 very briefly shows the main answers to the research questions; a list of the major findings will be provided as a summary in the next chapter: Conclusion and Implications.

Table 6.6: Answers to Research Questions

Research Questions	Answers
RQ1: What is the range and frequency of VLS used by the Libyan EFL learners?	A range of VLS with more frequent discovery strategies than consolidation strategies in terms of use
RQ2: How do EFL learners view their vocabulary learning and how this affects their vocabulary knowledge?	HVK student interviewees used more deep strategies and were more efficient in using them than their MVK and LVK counterparts
RQ3: What is the Libyan EFL learners' vocabulary knowledge in terms of reception, controlled production and free production and how do these relate to one another?	Overall fairly low, especially for GB learners; correlations between VLT, CPA, and FPA were highly significant and positive.
RQ4: Is there a correlation between the Libyan EFL learners' vocabulary knowledge and their use of VLS?	Yes, a range of frequent and infrequent VLS had positive or negative correlation with the three dimensions of vocabulary knowledge.
RQ5: Is there relationship between the learners' motivation to learn English, their use of VLS and their vocabulary knowledge?	A few weak correlations

CHAPTER SEVEN

Conclusion and Implications

This chapter starts with a summary of the major findings of the current study presented in the previous chapter and then proceeds to their pedagogical implications. Then, it describes the contributions to knowledge this study has made to the study of how people acquire vocabulary in the classroom. Finally, the limitations of the study and suggestions for further research are outlined.

7.1. Summary of the Major Findings

This section begins with presenting the major findings, where appropriate accompanied with their pedagogical implication relevant to the Libyan EFL learners.

7.1.1. Use of VLS

- In general, the Libyan EFL learners reported use of a wide range of VLS even though their overall average use is relatively low. Some differences in VLS use exist between the two groups as well as individuals in that, for instance, GB learners reported more frequent use of many VLS than GA learners; however, there is mostly no difference in rank order between the strategies which is more important than the sheer number.
- The most frequently used strategies were the discovery strategies of consulting dictionaries (mostly bilingual English/Arabic), and guessing meaning from context.
- The interview data also show that unlike the learners with low vocabulary knowledge (LVK) who used the monolingual dictionaries mainly for getting

pronunciation, the learners with high vocabulary knowledge (HVK) reported more use of monolingual dictionaries for learning pronunciation, understanding meaning as well as learning new synonyms. Regarding guessing learners are not familiar with how to use different context clues that help make a successful guess.

- The Libyan EFL learners seem to focus their attention more on discovery strategies than consolidation strategies; they can be described as more eager to discover meaning of unknown words to solve their problems with the task in hand than to devote an effort to the process of learning new words. These learners should be encouraged by teachers to be more independent in their learning through "learner training" that especially involves explaining learning strategies that help with meaning retention for the long run.
- The social strategies that involve asking teacher or working in groups were the least frequently used discovery strategies by both groups. This is a characteristic of teacher-centred classes where learners are not key players in the learning process as is the case in many EFL classes all over the world (teacher-fronted classes). The need for working in groups inside and outside classrooms is important for such learners so they can have full advantages of group learning such as practising and activating their receptive vocabulary knowledge, see Dansereau's (1988) description of advantages of group learning (Chapter 2, Section 2.2.1.4.2, page 36).
- The Libyan EFL learners reported a very infrequent use of word lists or asking their teachers to check accuracy of word lists. However, we have to be more realistic that, in the case of less successful learners or learners with low vocabulary knowledge like most of our Libyan EFL learners, it is necessary for them to use strategies like word lists in order to develop their vocabulary

knowledge, especially the higher frequency words, because lack of such knowledge will hamper them from getting the full advantage of a range of deep strategies like guessing and using monolingual dictionaries.

- With regard to consolidation strategies, the memory strategies (studying spelling, studying the sound of the word and saying the new word aloud) that particularly concentrate on the form of the word were frequently used strategies by both groups of the Libyan EFL learners, as were the cognitive strategies of verbal and written repetition, and the metacognitive strategy of watching English TV channels.
- However, in interviews many learners indicated using the strategies of watching English TV channels for both pleasure and learning and other metacognitive strategies like reading newspapers or assessing their vocabulary knowledge in their spare time, for example in summer holiday. This means that many learners consider using metacognitive strategies as an extra work separated from the learning processes, i.e. they do not pay enough attention to these strategies. These learners need to be more systematic in their learning; they need to adopt more metacognitive strategies which create more chances for learners to be exposed to a L2 through different media sources. This could not exist without teachers' cooperation, especially for such learners who tend to depend more on subject material and on what their teachers ask them to do as some of interviewees reported.
- The metacognitive strategies, in general, were less frequently used by the two groups of learners. Learners usually have no plans for assessing vocabulary to know their vocabulary size and to be aware of the extent to which the strategies they have been using are effective. As most interviewees reported, Libyan EFL

learners did not seem to skip or pass any unknown word regardless its importance for them. All these can be indications of lack of control and planning for learning. So the Libyan EFL learners need to be independent and to take control of their learning inside and outside class through being exposed to a range of VLS and being shown how to comfortably use them in appropriate activities in class.

- The most frequently used strategies by the learners are largely congruent with their rating of the ten most helpful strategies, i.e. the strategies which were rated in the top 10 were also among the most frequently used strategies. This suggests that these learners are unaware of the values of the other strategies which they do not use. Thus, explaining learning strategies explicitly is highly recommended for them.

To conclude this section, the findings are generally congruent with the hypothesis for the RQ1 and the RQ2 that EFL learners use a range of vocabulary learning strategies (VLS), but are unaware of other VLS. They also seem to be ineffective in using many VLS. Thus, strategy training is again recommended for the Libyan EFL learners in order to efficiently make use of a range of VLS essential for developing their vocabulary acquisition.

7.1.2. Vocabulary knowledge

- In general, the findings of the Libyan EFL learners' vocabulary knowledge match with our hypothesis for the first part of the third research question that the Libyan EFL learners lack knowledge about even the most frequent vocabulary levels.
- The results show a clear pattern of declining scores across frequency levels from highest to lowest in the VLT and CPA word frequency levels and from receptive

knowledge (VLT scores) to controlled productive knowledge (CPA scores). The gap decreases as we move from highest to lowest frequency levels. Also the gap is higher for GA scores than that for GB's because the mean scores for GA are significantly higher than those for GB in all levels.

- This gap means that learners are unable to use their receptive knowledge of vocabulary in productive situations. Hence, it is a must for such learners to be more exposed to the language through language in use activities. Teachers should employ appropriate activities that enhance learners' participation in class activities so that learners can use their receptive vocabulary knowledge through more practice: above all practice makes perfect.
- The second part of the RQ3 investigates the relationship between the three dimensions of the Libyan EFL learners' vocabulary knowledge. The findings show that there were internal high positive correlations within the elements of the VLT, CPA and FPA, with generally higher correlations for GA learners. This to a great extent confirms that the learners who did well in a lower frequency level (e.g. 3000 word level) could normally be assumed to have done well in a higher frequency level and vice versa.
- Significantly moderate to high positive correlations were observed across all word frequency levels of the VLT and CPA for both groups of learners. These positive correlations could mean that learners with higher receptive vocabulary knowledge are also higher in productive knowledge and vice versa.
- With respect to the FPA, moderate correlations were observed between the FPA elements, especially the 1st topic, with both VLT and CPA levels. This confirms the FPA validity and reliability as a measure of productive vocabulary size, since

it correlates with VLT and CPA which were taken from published sources, which have tested their reliability and validity.

- As an indicator of the high correlations between the learners' receptive and productive vocabulary knowledge, during the interviews it was apparent that all the HVK group of interviewees most often used English, whereas for the MVK and especially the LVK groups Arabic was the dominant language. In addition, this supports the positive correlation between learners' vocabulary knowledge and their language proficiency in general. This is in line with research findings in this area (e.g. Read, 1997; Gu and Johnson, 1996; Schmitt et al., 2001).

To conclude this section, the following are some pedagogical implications related to the findings of the Libyan EFL learners' vocabulary knowledge that have not been mentioned before. A possible recommendation for the Libyan EFL learners is to focus on strategies that help develop their receptive and productive knowledge similarly, since both are very low according to the findings of the current study, with more focus being given to the high frequency words. For learners with low vocabulary knowledge, they should maximize their vocabulary size as much as possible in direct vocabulary learning through word lists or vocabulary games. Teachers should also be more realistic and focus their learners' (especially year 1 and 2 students) attention on more intentional learning of vocabulary through providing more courses that mainly focus on vocabulary like morphology and reading comprehension courses that were reported to be beneficial for learners in terms of vocabulary learning, so that learners can build a good vocabulary repertoire. Teachers also need to devote more time to writing skills as learners reported some problems related to writing such as spelling and lack of productive vocabulary. Teachers may need to employ more writing activities in class and concentrate on the

process of writing in order to help students with aspects like spelling and using words in sentences which are highly valued by student interviewees.

7.1.3. Relationship between VLS and Vocabulary knowledge

- With regard to the discovery strategies, *using the monolingual dictionary* was positively correlated with GA learners' vocabulary knowledge, as were *guessing meaning from context* and *identifying part of speech* with the vocabulary knowledge for the two groups of learners. On the other hand, *using bilingual dictionaries* (*English/Arabic* and *Arabic/ English*), and *checking for L1 cognate* were negatively correlated with GA's vocabulary. The social strategies of *asking classmate for meaning* and *discovering meaning through group work* were negatively correlated with GB learners' vocabulary knowledge, as discussed in the previous Chapter, Section 6.4.1.
- Regarding consolidation strategies, the memory strategy of *learning words of an idiom together* had a significantly positive correlation with both groups' vocabulary knowledge, as were the two memory strategies of *studying the sound of the word* and *making an image of the form of the word* with GB learners' vocabulary knowledge; *studying part of speech* and *using the new word in sentences* with GA learners' vocabulary knowledge.
- Two cognitive strategies (*taking notes in class*; *make own lists of words)* were positively correlated with various levels of the three dimensions of the learners' vocabulary knowledge. The metacognitive strategies of *using computer programs*, *reading English newspapers and magazines* and *skipping the new word* had positive correlations with the vocabulary knowledge for GA learners, as was *listening to radio* with the vocabulary knowledge for GB learners.

- On the other hand, the memory strategies of *paraphrasing the meaning of the word* and *using scales for gradable adjectives* were negatively correlated with the vocabulary knowledge of GA learners. The cognitive strategy of *writing the new word many times* was also negatively correlated with GA learners' vocabulary knowledge; as were *keeping vocabulary notebook* and *taking notes in class*.
- The multiple regression results show that the strategies of *making own lists of words, learning words of idioms together, making an image of the form of the word* and *guessing meaning from context* were the best predictors of the learners' vocabulary knowledge. Such strategies should be more reliable for developing learners' vocabulary knowledge, so teachers should pay more attention to them through providing the training needed for learners in order to be used comfortably.
- All learners obtained high scores in the motivation test. This inconsistency between the learners' high motivation scores and their infrequent use of a range of VLS and the low scores in vocabulary tests may contribute to making just few weak correlations between these variables

Finally, since the relationship between learner variables and language learning, in this case the learners' VLS and their vocabulary knowledge, goes in both directions, i.e., both can influence each other (Cook 1986), building a vocabulary store would help learners use a wide range of VLS like guessing from context, using monolingual dictionaries and using media that require a certain knowledge of vocabulary (about 3000) to be used efficiently; Such strategies in turn will enhance incidental learning and contribute to developing learners' vocabulary knowledge. Moreover, teachers should focus their learners' attention on the VLS positively correlated with the learners' vocabulary knowledge, especially after finding out that most of the VLS correlated with their

receptive vocabulary were correlated with the controlled productive and free productive vocabulary knowledge as well.

In conclusion, this research remains in a sense exploratory and it is hoped it will encourage more research in the area of VLS and vocabulary knowledge, especially in less investigated EFL contexts such as the Libyan context.

7.2. Contributions of this Study

- First, as a contribution to knowledge in terms of research methods, the FPA test used to measure the EFL learners' free productive vocabulary knowledge in this study is an innovative test, and to my knowledge, this type of test has never been used for this purpose before. The learners' FPA scores had significantly moderate correlations with both the VLT and CPA scores and the VLT and CPA tests were taken from published sources, as described in Chapter 3, Section 3.4.3, which have tested their reliability and validity. This confirms the FPA validity and reliability as a new measure of free productive vocabulary knowledge.
- Second, the findings of this study reconfirm that the correlation between vocabulary learning strategies (VLS) and vocabulary knowledge is more a matter of quality than quantity of use of VLS. The findings show that the Libyan EFL learners' vocabulary knowledge was positively and/or negatively correlated with both frequently (most often) and infrequently used VLS (see appendix 10); this indicates that the range and quality of use (confirmed by interviews data) of VLS rather than the quantity and frequency of use determine the correlations between the Libyan EFL learners' vocabulary knowledge and the VLS they use. This can also be demonstrated by the fact that GB learners reported more frequent use of

VLS than that of GA learners, but GA learners' vocabulary knowledge is significantly better than that of GB learners; this indicates that GA learners are more efficient in using different VLS than GB learners, considering the positive correlations observed between the Libyan EFL learners' vocabulary knowledge and a range of VLS they use. This also contradicts research because other studies of LLS and VLS generally show better students using more strategies; this result, therefore, stands out as new here.

- Third, this study is carried out in a new context; to my knowledge, it is the first study concentrating on the vocabulary learning strategies of the Libyan EFL learners in relation to their vocabulary knowledge. Thus, it would work as a starting point for further studies undertaken on the Libyan context.
- Fourth, there have been very few large scale studies that tackled the area of VLS used by EFL/ESL learners of English. Moreover, very few large-scale studies (e.g. Gu and Johnson, 1996) have explicitly measured the relationship between learners' reported use of VLS and their vocabulary knowledge. The current study is similar to Gu and Johnson's (1996) study and Schmitt's (1997) study in that these studies used a questionnaire to examine learners' vocabulary learning strategies. However, the subjects' of the other studies were non-English majors, whereas this study is dealing with English majors. More importantly, this study utilized an additional research method, namely three vocabulary tests aiming at exploring different dimensions of the EFL learners' vocabulary knowledge and their relation to the VLS learners use. Thus, the findings of the current study revealed different correlations with different elements and dimensions of vocabulary knowledge. This will hopefully provide meaningful, significant, and

new information in the research area of vocabulary learning strategies and learning outcomes.

- Fifth, the study in hand utilized semi-structured interviews to elicit in depth details about how three groups of learners (learners with high vocabulary knowledge, learners with moderate vocabulary knowledge and learners with low vocabulary knowledge) tackle vocabulary learning; so it has explored differences between more and less successful learners in terms of their use of VLS in relation to their vocabulary knowledge. Hence, it was able to recommend some pedagogical implications, as above, for EFL learners in general and particularly for the less successful learners.
- Sixth, there was a gap between the learners' receptive and productive vocabulary knowledge which means that learners are unable to use their receptive knowledge of vocabulary in productive situations. However, the moderate to high positive correlations between the receptive and productive vocabulary knowledge confirm that learners with higher receptive vocabulary knowledge are also higher in productive knowledge and vice versa. This reconfirms Laufer's (1998) findings that the more proficient learners in receptive vocabulary are more proficient in productive vocabulary as well; however, this study is carried out in a different EFL context with a different L1 orthographic system.

7.3. Limitations of the Study

- First, we have to take into consideration that data collection methods that involve asking learners to describe their behaviour are always vulnerable to criticism because respondents' answers might not reflect their actual behaviour as they are not adequately aware of it, as Moir and Nation (2002, p. 18) suggest. However, the anonymity of the vocabulary learning strategies questionnaire (VLSQ) and the in-depth details about the learners' responses to the VLSQ items obtained by the semi-structured interviews can significantly decrease the level of false responses.
- Due to the complexity of this area a full review of motivation was impossible. Although the instruments measured the students' integrative and instrumental motivation in relation to the VLS they use and their vocabulary knowledge, the factors affecting motivation were not reflected in the instruments, for example, there were no questions about how hard the learners claim to work on English.
- The semi-structured interviews targeted Group A learners only; Group B should have been interviewed as well, but the researcher first thought of treating all the subjects as one group; when clear differences between them became apparent, in terms of VLS use and mostly in vocabulary knowledge, it was too late to interview them because the students had already finished their study and the researcher had gone to the UK for his study. Interviewees were divided into three groups based on their VLT total scores and nobody from GB learners was among the HVK group. Above all interviews were utilized as a supplementary instrument for the VLSQ. Most importantly, the important thing would not be the difference between the two groups in absolute scores, as is the case here, so much as the difference in rank order between the strategies, and here there is hardly any difference.

- In general the instruments utilized in this study were not designed to get much solid evidence about effectiveness of use of VLS; more real detailed ideas about how learners go about doing VLS would have been useful, for example gained from other instruments such as think-aloud protocols or other research designs such as the experimental research, beyond the scope of this study.

7.4. Suggestions for Further Research

Taking into account the research methods and findings of this study, the following are some suggestions for further research:

- This study restricted itself to EFL majors at one university in the Libyan context, so it can be replicated at other universities in Libya to compare their findings with the current study's to see if similar or different results are obtained.
- This study has been conducted at one point of time, it is suggested that more longitudinal and experimental studies that can monitor changes in use of vocabulary learning strategies and vocabulary knowledge over time can be undertaken, to determine precisely which strategies can be predictors of vocabulary acquisition.
- The findings revealed less frequent use of social and metacognitive strategies. Other experimental studies can be conducted to compare the impact of strategy training in using such strategies on control and experimental groups to see if the use of these strategies influences the learners' vocabulary knowledge.
- Other more focused experimental studies can focus on training learners to comfortably use the strategies identified in this study as related to the learners' vocabulary knowledge to see the effect of training on learners' use of strategies on one hand and on their vocabulary acquisition on the other.

REFERENCES

Ahmed, M. O. (1989). Vocabulary learning strategies. In P. Meara (Ed.), *Beyond Words*. London: CILT, 3-14.

Al-Fuhaid, M. (2004). *Vocabulary learning strategies: An empirical study of their use and evaluation by Saudi EFL learners majoring in English.* Thesis (PhD). University of Durham.

Atkinson, R. and Raugh, M. (1975). An application of the mnemonic Keyword method to the acquisition of a Russian vocabulary. *Journal of Experimental Psychology, 104*, 126-33.

Bahrick, H. (1984). Semantic memory content in permastore: fifty years of memory for Spanish learned in school. *Journal of Experimental Psychology: General, 113 (1)*, 1-30.

Bauer, L. and Nation, P. (1993). Word families. *International Journal of Lexicography, 6*, 253-279.

Beglar, D. and Hunt, A. (1999). Revising and validating the 2000 word level and university word level vocabulary tests. *Language Testing*, 16, 131-62.

Bensoussan, M., Sim, D. and Weiss, R. (1984). The effect of dictionary usage on EFL test performance. *Reading in a Foreign Language 2*, 262-76.

Brown, J. D. (2001). *Using Surveys in Language Programmes*. Cambridge: Cambridge University Press.

Bryman, A. (2001). *Social Research Methods*. Oxford: Oxford University Press.

Bryman, A. (2004). *Social Research Methods*. Oxford: Oxford University Press.

Cameron, L. (2002). Measuring vocabulary size in English as an additional language. *Language Teaching Research, 6 (2)*, 145-173.

Campion, M. and Elley, W. (1971). *An Academic Vocabulary List*. Wellington: NZCER.

Chamot, A., O'Malley, J., Kupper, L. and Impink-Hernandez, M. (1987). *A study of learning strategies in foreign language instruction: First year report.* Rosslyn, Va.: Interstate Research Associates.

Chomsky, N. (1989). Some notes on economy of derivation and representation. *MIT Working Papers in Linguistics 10*, 43-74.

Clarke, D. and Nation, P. (1980). Guessing the meanings of words from context: Strategy and techniques. *System 8 (3)*, 211-220.

Clement, R., Dornyei, Z. and Noels, K. (1994). Motivation, self-confidence and group cohesion in the foreign language classroom. *Language Learning, 44*, 417-48.

Cohen, A. (1990). *Language Learning: Insights for learners, teachers, and researchers.* Boston, MA: Heinle & Heinle.

Cohen, A. (1998). *Strategies in Learning and Using a Second Language.* London and New York: Longman.

Cohen, A. and Aphek, E. (1981). Easifying second language learning. *Studies in Second Language Acquisition, 3(2)*, 211-220.

Cohen, L. and Manion, L. (1994). *Research Methods in Education* (4th Ed). London and New York: Routledge.

Cohen, L., Manion, L. and Morrison, K. (2000). *Research Methods in Education* (5th Ed). London: Routledge Falmer.

Cohen, A. and Olshtain, E. (1994). Researching the production of second language speech acts. In E. Tarone, S. Gass and A. Cohen (Eds), *Research Methodology in Second Language Acquisition*. New Jersey: Lawrence Erlbaum Associates, 143-156.

Cook, V. (1986). *Experimental Approaches to Second Language Teaching*. Pergamon Press.

Cook, V. (1996). *Second Language Learning and Language Teaching*. London: Arnold.

Cook, V. (2001). *Second Language Learning and Language Teaching*. London: Arnold.

Coxhead, A. (2000). A new academic word list. *TESOL Quarterly, 34 (2)*, 213-238.

Craik, F. and Lockhart, R. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behaviour, 11*, 671-84.

Craik, F. and Tulving, E. (1975). Depth of processing and the retention of words in episodic memory. *Journal of Experimental Psychology, 104*, 268-94.

Crookes, G. and Schmidt, R. (1991). Motivation: Responding to research agenda. *Language Learning, 41*, 469-512.

Dansereau, D. (1988). Cooperative learning strategies. In C. Weinstein, E. Goetz and P. Alexander (Eds.), *Learning and Study Strategies: Issues in assessment, instruction and evaluation*. New York: Academic Press, 103-120.

Dornyei, Z. (2001). *Teaching and Researching Motivation*. Edinburgh Gate, Harlow, Essex: Pearson Education Ltd.

Dornyei, Z. (2003). *Questionnaires in Second Language Research: Construction, administration, and processing*. Mahwah, New Jersey: Lawrence Erlbaum Associates.

Douglas, D. and Selinker, L. (1994). Research methodology in context-based second language research. In E. Tarone, S. Gass and A. Cohen (Eds.), *Research Methodology in Second Language Acquisition*. New Jersey: Lawrence Erlbaum Associates, 119-131.

Francis, W. and Kučera, H. (1982). *Frequency Analysis of English Usage*, Boston: Houghton Mifflin Company.

Gardner, R. (1985*). Social Psychology and Second Language Learning: The role of attitudes and motivation*. London: Edward Arnold.

Gardner, R., Lalonde, R. and Moorcroft, R. (1985). The role of, attitudes and motivation in second language learning: Correlational and experimental considerations. *Language Learning, 35*, 207-227.

Gardner, R. and Lysynchuk, L. (1990). The role of aptitude, attitudes, motivation and language use on second-language acquisition and retention. *Canadian Journal of Behavioural Science, 22*, 254-270.

Gardner, R. and MacIntyre, P. (1993). On the measurement of affective variables in second language learning. *Language Learning, 43 (2)*, 157-194.

Gairns, R. and Redman, S. (1986). *Working with Words*. Cambridge: Cambridge University Press.

Green, J. and Oxford, R. (1995). A closer look at learning strategies, L2 proficiency and gender. *TESOL Quarterly. 29(2),* 261-297.

Gu, Y. (1994). Vocabulary learning strategies of good and poor Chinese EFL learners. In N. Bird, P. Flavey, A. Tsui, D. Alison and A. McNeil (Eds), *Language and Learning*. Hong Kong: Government Printer, 376-401.

Gu, Y. (2005). *Vocabulary Learning Strategies in the Chinese EFL Context*. Singapore: Marshall Cavendish Academic.

Gu, Y. and Johnson, R. (1996). Vocabulary learning strategies and language learning outcomes. *Language Learning, 46*, 643-679.

Hedge, T. (2000). *Teaching and Learning in the Language Classroom*. Oxford: Oxford University Press.

Jackson, W. (1995). *Methods: Doing Social Research*. Prentice Hall Canada INC. Scarborough, Ontario.

Kerlinger, F. (1970). *Foundations of Behavioural Research*. New York: Holt, Rinehart and Winston.

King, N. (1994). The qualitative research interview. In C. Cassell and G. Symon (Eds), *Qualitative Methods in Organizational Research*. London: Sage Publications.

Knapp, T. (1986). The emergence of cognitive psychology in the latter half of twentieth century. In T. Knapp and L. Robertson (Eds) *Approaches to Cognition: Contrasts and controversies*. Hillsdale, NJ: Erlbaum.

Krashen, S. (1982). *Principles and Practice in Second Language Acquisition*. Oxford: Pergamon.

Krashen, S. (1989). We acquire vocabulary and spelling by reading: Additional evidence for input hypothesis. *Modern Language Journal, 73 (4),* 440-464.

Kučera, H. and Francis, W. (1967). *A Computational Analysis of Present Day American English*. Providence, Rhode Island: Brown University Press.

Larsen-Freeman, D. and Long, M. (1991). *An Introduction to Second Language Acquisition Research.* New York: Longman.

Laufer, B. (1997a). What is in a word that makes it hard or easy: Some intralexical factors that affect the learning of words. In N. Schmitt and M. McCarthy (Eds), *Vocabulary: Description, Acquisition, and Pedagogy.* Cambridge: Cambridge University Press, 140-155.

Laufer, B. (1997b). The lexical plight in second language reading: Words you don't know words you think you know and words you can't guess. In J. Coady and T. Huckin (Eds), *Second Language Vocabulary Acquisition: A rationale for pedagogy.* Cambridge: Cambridge University Press, 20-34.

Laufer, B. (1998). The development of passive and active vocabulary in a second language: same or different? *Applied Linguistics, 19 (2)*, 255-71.

Laufer, B. and Goldstein, Z. (2004). Testing vocabulary knowledge: size, strength, and computer adaptiveness. *Language Learning, 54 (3),* 399-436.

Laufer, B. and Nation, P. (1999). A vocabulary-size test of controlled productive ability. *Language Testing, 16 (1),* 33-51.

Laufer, B. and Paribakht, T. (1998). The relationship between passive and active vocabularies: effects of language learning context. *Language Learning, 48*, 365-91.

Lawson, M. and Hogben, D. (1996). The vocabulary learning strategies of foreign-language students. *Language learning, 46*, 101-135.

Levelt, W. (1989). *Speaking: From Intention to Articulation.* Massachusetts: MIT Press.

Lewis, A. (1992). Group child interviews as a research tool. *British Educational Research Journal, 18 (4)*, 413-21.

Macaro, E. (2001*). Learning Strategies in Foreign and Second Language Classrooms.* London, New York: Continuum.

Macaro, E. (2006). Strategies for language learning and for language use; Revising the theoretical framework. *The Modern Language Journal, 90 (3),* 320-337.

Mackey, A. and Gass, S. (2005). *Second Language Research: Methodology and design.* Mahwah, New Jersey: Lawrence Erlbaum Associates.

Markee, N. (1994). Toward an ethnomethodological respecification of second language acquisition studies. In E. Tarone, S. Gass and A. Cohen (Eds), *Research Methodology in Second Language Acquisition.* New Jersey: Lawrence Erlbaum Associates, 89-116.

McCarthy, M. (1990). *Vocabulary.* Oxford: Oxford University Press.

Meara, P. (1993). The bilingual lexicon and the teaching of vocabulary. In Schreuder, R. and Weltens, B. (Eds), *The Bilingual Lexicon.* Amsterdam Philadelphia: J. Benjamins, 279-297.

Meara, P. and Buxton, B. (1987). An alternative to multiple choice vocabulary tests. *Language Testing, 4,* 142-154.

Meara, P. and Jones, G. (1988). Vocabulary size as a placement indicator. In P. Grunwell (Eds), *Applied Linguistics in Society.* London: Centre for Information on Language Teaching and Research, 80-87.

Moir, J. and Nation, P. (2002). Learners' use of strategies for effective vocabulary learning. *Prospect, 17 (1),* 15-35.

Naiman, N., Frohlich, M., Stern, H., and Todesco, A. (1996). *The Good Language Learner.* Clevedon, UK: Multilingual Matters.

Nation, P. (1983). Testing and teaching vocabulary. *Guidelines, 5,* 12-25.

Nation, P. (1990). *Teaching and Learning Vocabulary.* New York: Newbury House.

Nation, P. (1993). Vocabulary size, growth, and use. In Schreuder, R. and Weltens, B (Eds), *The Bilingual Lexicon.* Amsterdam Philadelphia: J. Benjamins, 115-134.

Nation, P. (2001). *Learning Vocabulary in Another Language.* Cambridge: Cambridge University Press.

Nation, P. and Hwang, K. (1995). Where would general service vocabulary stop and special purposes vocabulary begin. *System, 23,* 35-41.

Nation, P. and Meara, P. (2002). Vocabulary. In N. Schmitt (Eds), *An Introduction to Applied Linguistics.* New York: Oxford University Press Inc., 35-54.

Nunan, D. (1992). *Research Methods in Language Learning.* Cambridge: Cambridge University Press.

O'Malley, J. (1987). The effect of training in the use of learning strategies on acquiring English as a second language. In A.Wenden and J. Rubin (Eds). *Learner Strategies in Language Learning*. Englewood Clifs, NJ: Prentice Hall International, 134-144.

O'Malley, J., Chamot, A., Stewner-Manzanares, G., Kupper, L. and Russo, R. (1985). Learning strategies used by beginning and intermediate ESL students. *Language Learning, 35*, 21-46.

O'Malley, J. and Chamot, A. (1990). *Learning Strategies in Second Language Acquisition.* Cambridge: Cambridge University Press.

Oxford, R. (1989). Use of language learning strategies: A synthetic of studies with implication for strategy training. *System, 17*, 235-247.

Oxford, R. (1990). *Language Learning Strategies: What every teacher should know.* New York: Newbury House/Harber and Row.

Oxford, R. (1993). Instructional implications of gender differences in L2 learning styles and strategies. *Applied Language Learning, 4 (1*-2), 65-94.

Oxford, R. and Burry-Stock, J. (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the Strategy Inventory for Language Learning (SILL). *System, 23 (1*), 1-23.

Oxford, R. and Cohen, A. (1992). Language learning strategies: Critical issues in concept and definition. *Applied Language Learning, 3 (1*-2), 1-35.

Oxford, R and Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. *The Modern Language Journal, 73 (3*), 291-300.

Pressley, M., Levin, J. and Miller, G. (1982). The Keyword method compared to alternative vocabulary learning strategies. *Contemporary Educational Psychology, 7*, 50-60.

Read, J. (1988). Measuring the vocabulary knowledge of second language learners. *RELC Journal, 19 (1)*, 12-25.

Read, J. (1997). Vocabulary and testing. In N. Schmitt and M. McCarthy (Eds), *Vocabulary: Description, Acquisition, and Pedagogy.* Cambridge: Cambridge University Press, 303-320.

Read, J. (2000). *Assessing Vocabulary*. Cambridge: Cambridge University Press.

Reiss, M. (1983). Helping the unsuccessful language learner. *Canadian Modern Language Review, 39 (2),* 256-266.

Richards, J. (1976). The role of vocabulary teaching. *TESOL Quarterly, 10 (1)*, 77-89.

Rubin, J. (1975). What the "good language learner" can teach us. *TESOL Quarterly, 9* 41-51.

Rubin, J. (1987). Learner strategies: Theoretical assumptions, research history, and typology. In A.Wenden and J. Rubin (Eds). *Learner Strategies in Language Learning*. London: Prentice Hall International, 15-30.

Russell, P. (1979). *The Brain Book*. London: Routledge and Kegan Paul.

Sanaoui, R. (1995). Adult learners' approaches to learning vocabulary in second languages. *Modern Language Journal, 79*, 15-28.

Scarcella, R. and Oxford, R. (1992). *The Tapestry of Language Learning: The individual in the communicative classroom*. Boston: Heinle & Heinle.

Schmitt, N. (1997). Vocabulary learning strategies. In N. Schmitt and M. McCarthy (Eds), *Vocabulary: Description, Acquisition, and Pedagogy*. Cambridge: Cambridge University Press, 199-227.

Schmitt, N. (2000). *Vocabulary in Language Teaching*. Cambridge: Cambridge University Press.

Schmitt, N. and Meara, P. (1997). Researching vocabulary through a word knowledge framework: word association and verbal suffixes. *Studies in Second Language Acquisition*, 19, 17-36.

Schmitt, N., Schmitt, D. and Clapham, C. (2001). Developing and exploring the behaviour of two new versions of the Vocabulary Levels Test. *Language Testing, 18 (1)*, 55-88.

Scholfield, P. (1999). Dictionary use in reception. *International Journal of Lexicography, 12 (1)*, 13-34.

Seliger, H. and Shohamy, E. (1989). *Second Language Research Methods*. Oxford: Oxford University Press.

Shohamy, E. (1994). The role of language tests in the construction and validation of second-language acquisition theories. In E. Tarone, S. Gass and A. Cohen (Eds), *Research Methodology in Second Language Acquisition*. New Jersey: Lawrence Erlbaum Associates, 133-142.

Singleton, D. (1989). *Language Acquisition: The age factor*. Clevedon: Multilingual Matters.

Singleton, D. (1999). *Exploring the Second Language Mental Lexicon*. Cambridge: Cambridge University Press.

Skehan, P. (1991). *Individual Differences in Second Language Learning* (4th Eds). London: Edward Arnold.

Spolsky, B. (1995). *Measured Words*. Oxford: Oxford University Press.

Stern, H. (1975). What can we learn from the good language learner? *The Canadian Modern Language Review, 34*, 304-318.

Stern, H. (1983). *Fundamental Concepts of Language Teaching*. Oxford: Oxford University Press.

Stoddard, G. (1929). An experiment in verbal learning. *Journal of Educational Psychology, 20*, 452-457.

Stoffer, I. (1995). *University foreign language students' choice of vocabulary learning strategies as related to individual difference variables*. Thesis (PhD). University of Alabama.

Thorndike, E. and Lorge, L. (1944). *The Teacher's Word Book of 30,000 Words*. New York: Teachers College, Columbia University.

Tseng, W., Dornyei, Z. and Schmitt, N. (2006). A new approach to assessing strategic learning: the case of self-regulation in vocabulary acquisition. *Applied Linguistics, 27 (1)*, 78-102.

Vann, R. and Abraham, R. (1990). Strategies of unsuccessful language learners. *TESOL Quarterly, 24 (2)*, 177-198.

Vermeer, A. (1992). Exploring the second language learner lexicon. In L. Verhoeven and J. Dejong (Eds). *The Construct of Language Proficiency*. J. Penjamins, 147-162.

Waring, R. (1997). A comparison of the receptive and productive vocabulary sizes of some second language learners. *Immaculata (Notre Dame Seishin University, Okayama), 1*, 53-68.

Wenden, A. (1987a). Conceptual background and utility. In A.Wenden and J. Rubin (Eds). *Learner Strategies in Language Learning*. Englewood Cliffs, NJ: Prentice Hall International, 3-13.

Wenden, A. (1987b). How to be a successful language learner: Insight and prescriptions from L2 learners. In A.Wenden and J. Rubin (Eds). *Learner Strategies in Language Learning*. Englewood Cliffs, NJ: Prentice Hall International, 103-117.

Wenden, A. (1987c). Incorporating learner training in the classroom. In A.Wenden and J. Rubin (Eds). *Learner Strategies in Language Learning*. Englewood Cliffs, NJ: Prentice Hall International, 159-168.

Wenden, A., and Rubin, J. (Eds). (1987). *Learner Strategies in Language Learning*. Englewood Cliffs, NJ: Prentice Hall International.

West, M. (1953). *A general Service List of English Words*. London: Longman.

Wharton, G. (2000). Language learning strategy use of bilingual foreign language learners in Singapore. *Language Learning 50 (2),* 203-243.

Wilkins, D.A. (1972). *Linguistics in Language Teaching*. London: Arnold.

Wittrock, M. (1979). Applications of cognitive psychology to education and training. In H. O'Neil and C. Spielberger (Eds). *Cognitive and Affective Learning Strategies*. New York: Academic Press, 309-317.

Xue, G. and Nation, P. (1984). A university word list. *Language Learning and Communication, 3*, 215-229.

APPENDICES

Appendix 1: Schmitt's (1997) Taxonomy of VLS

- *Strategies for the discovery of a new word's meaning*

1. Determination Strategies

DET Analyze part of speech
DET Analyze affixes and roots
DET Check for L1 cognate
DET Analyze any available pictures or gestures
DET Guess from textual context in reading
DET Bilingual dictionary
DET Monolingual Dictionary
DET Word list*
DET Flash cards*

2. Social Strategies

SOC Ask teacher for an L1 translation
SOC Ask teacher for a paraphrase or synonym of new word
SOC Ask teacher for a sentence including the new word
SOC Ask classmates for meaning
SOC Discover new meaning through group work activity

- *Strategies for consolidating a word once it has been encountered*

SOC Study and practice meaning in a group
SOC Teacher checks students' flash cards or word lists for accuracy
SOC Interact with native speakers*

3. Memory Strategies

MEM Study word with a pictorial representation of its meaning*
MEM Image word's meaning
MEM Connect word to a personal experience
MEM Associate the word with its coordinates
MEM Connect the word to its synonyms and antonyms
MEM Use semantic maps
MEM Use 'scales' for gradable adjectives
MEM Peg Method*
MEM Loci Method*
MEM Group words together to study them*
MEM Group words together spatially on a page*
MEM Use new word in sentences
MEM Group words together within a stroryline*
MEM Study the spelling of a word
MEM Study the sound of a word
MEM Say new word aloud when studying
MEM Image word form
MEM Underline initial letter of the word*
MEM Configuration*

MEM Use Keyword Method
MEM Affixes and roots (remembering)
MEM Part of speech (remembering)
MEM Paraphrase the word's meaning
MEM Use cognates in study
MEM Learn the words of an idiom together
MEM Use physical actions when learning a word
MEM Use semantic feature grids*

4. Cognitive Strategies
COG Verbal repetition
COG Written repetition
COG Word lists
COG Flash cards
COG Take notes in class
COG Use the vocabulary section in your textbook
COG Listen to tape of word lists*
COG Put English labels on physical objects*
COG Keep a vocabulary notebook*

5. Metacognitive Strategies
MET Use English language media (songs, movies, newscasts, etc.) *
MET Testing oneself with word tests*
MET Use spaced word practice*
MET Skip or pass new word
MET Continue to study word over time

- = strategy was not included on the initial list used in Schmitt's survey

Appendix 2: The Taxonomy of the Current Study

1. Determination Strategies

1. I identify the part of speech of the new word (verb, noun, adjective) to help me know its meaning.
2. I break the new word up into the main parts (un-safe-ly = unsafely).
3. I check for Arabic words that are similar in form and meaning to the new word.
4. I analyze any available pictures to help me understand new words.
5. I analyze any available gestures to help me understand new words.
6. I use a bilingual dictionary (English / Arabic).
7. I use a bilingual dictionary (Arabic / English).
8. I use a monolingual Dictionary (English / English).
9. I guess the meaning of the new word from the context in which it occurs.

2. Social Strategies

10. I ask a teacher for translation of the new word into Arabic.
11. I ask a teacher for a paraphrase of the new word.
12. I ask a teacher for a sentence including the new word.
13. If you use word lists, do you ask a teacher whether they are accurate?
14. I ask classmates for the meaning of the new word.
15. I discover new meanings through group work activity.
16. I study and practice meaning of the new words in a group of students.

3. Memory Strategies

17. I make a picture in my mind of the new word's meaning.
18. I study the spelling of the new word.
19. I study the part of speech of the new word (verb, noun, adjective) to remember it.
20. I connect the new word to a personal experience (e.g. connecting the word research with the final project).
21. I paraphrase the meaning of the word I am learning in another way.
22. I study the sound of the new word.
23. I associate the new word with its coordinates (apples with oranges, peaches and etc.).
24. I say the new word aloud when studying.
25. I connect the new word to its synonyms and antonyms.
26. I learn the words of an idiom together.
27. I make an image in my mind of the form of the new word.
28. I use 'scales' for gradable adjectives (e.g. huge, big, small).
29. I use the Keyword Method.
30. I use the new word in sentences.

4. Cognitive Strategies

31. I repeat the new word over and over.
32. I write the new word many times.
33. I make my own lists of new words.
34. I keep a vocabulary notebook for expanding rehearsal.
35. I take notes of the newly learned words in class.

5. Metacognitive Strategies

36. I try to develop my vocabulary knowledge by watching English TV channels (e.g. movies, songs, documentary).

37. I try to develop my vocabulary knowledge by using computer programs (e.g. internet).
38. I try to develop my vocabulary knowledge by listening to English radio programs (songs, news).
39. I try to develop my vocabulary knowledge by reading English newspapers and magazines.
40. I revise the newly learned words soon after the initial meeting.
41. I continue to study the word over time.
42. I revise the newly learned words using spaced repetition.
43. I skip the new word.
44. I try to assess my vocabulary knowledge (e.g. with word tests).

Appendix 3 (A): The English Version of the VLSQ

Vocabulary Learning Strategies Questionnaire

Dear Student

This Questionnaire is designed to gather information about how Libyan majors of English at university level as students of a foreign language, go about learning vocabulary. The researcher, who is a Libyan PhD student at the University of Newcastle Upon Tyne, UK, wishes to use this information for a study investigating the role of vocabulary learning strategies used by EFL learners on their vocabulary acquisition. Please read each of the following statements. You are kindly requested to indicate how often you have used a certain strategy, irrespective of the skills (i.e. listening, reading, speaking, and writing) and of the place of learning (i.e. university, and home). If you do not use a strategy at all, please tick the word *never.* If you use a strategy, please tick one of the words, *seldom, occasionally, often, usually* or *always,* according to the frequency. These words mean: *never (0%); seldom* (rarely, *20%); occasionally* (40%); *often* (60%); *usually* (80%) and *always* (100%). If you use a bilingual dictionary 80% of the time when learning vocabulary, for example, please tick the word *usually* the following way:

Never 0%	Seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%
				×	

Please tick the response (*never, seldom, occasionally, often, usually* or *always*) that tells what you actually do. NOT what you should do or want to do. There are no right or wrong responses to these statements.

Part One

Please answer these questions first, before you continue on to the following questionnaire.

1. Name (optional):
   _____
2. Sex: male / female (circle one)
3. Age: _____ years old
4. Mother tongue _____
5. How long have you been studying English? _____ years
6. If you have studied English or lived in an English speaking country please indicate how long it was.
   Years: _____ and months: _____ .
7. If and only if you have studied a foreign language other than English, please indicate which language and for how long.
   language: _____' length of study: _____ years and _____month.

Part Two

1. I identify the part of speech of the new word (verb, noun, adjective) to help me know its meaning.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

2. I ask a teacher for translation of the new word into Arabic.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

3. I make a picture in my mind of the new word's meaning.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

4. I repeat the new word over and over.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

5. I try to develop my vocabulary knowledge by watching English TV channels (e.g. movies, songs, documentary).

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

6. I break the new word up into the main parts (un-safe-ly = unsafely).

sever 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

7. I study the spelling of the new word.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

8. I study the part of speech of the new word (verb, noun, adjective) to remember it.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

9. I try to develop my vocabulary knowledge by using computer programs (e.g. internet).

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

10. I ask a teacher for a paraphrase of the new word.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

11. I connect the new word to a personal experience (e.g. connecting the word research with the final project).

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

12. I write the new word many times.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

13. I check for Arabic words that are similar in form and meaning to the new word.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

14. I try to develop my vocabulary knowledge by listening to English radio programs (songs, news).

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

15. I ask a teacher for a sentence including the new word.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

16. I paraphrase the meaning of the word I am learning in another way.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

17. I study the sound of the new word.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

18. I associate the new word with its coordinates (e.g. apples with oranges, peaches and etc.).

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

19. I try to develop my vocabulary knowledge by reading English newspapers and magazines.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

20. I make my own lists of new words.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

21. If you use word lists, do you ask a teacher whether they are accurate?

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

22. I analyze any available pictures to help me understand new words.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

23. I analyze any available gestures to help me understand new words.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

24. I revise the newly learned words soon after the initial meeting.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

25. I continue to study the word over time.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

26. I keep a vocabulary notebook for expanding rehearsal.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

27. I ask classmates for the meaning of the new word.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

28. I say the new word aloud when studying.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

29. I revise the newly learned words using spaced repetition.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

30. I connect the new word to its synonyms and antonyms.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

31. I learn the words of an idiom together.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

32. I discover new meanings through group work activity.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

33. I make an image in my mind of the form of the new word.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

34. I skip the new word.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

35. I take notes of the newly learned words in class.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

36. I use a bilingual dictionary (English / Arabic).

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

37. I use a bilingual dictionary (Arabic / English).

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

38. I study and practice meaning of the new words in a group of students.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

39. I try to assess my vocabulary knowledge (e.g. with word tests).

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

40. I use 'scales' for gradable adjectives (e.g. huge, big, medium, small).

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

41. I use the Keyword Method. Using this strategy involves finding an L1 word sounding like the L2 word, then creating an image combining the two concepts.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

42. I use a monolingual Dictionary (English / English).

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

43. I guess the meaning of the new word from the context in which it occurs.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

44. I use the new word in sentences.

never 0%	seldom 20%	occasionally 40%	often 60%	usually 80%	always 100%

Part Three

Please answer these two questions:

1. Please rate the ten most helpful strategies for you out of these forty strategies: (write the number of the strategy in the space provided below).

1	2	3	4	5	6	7	8	9	10

2. Please add any additional strategies you have used that are not written above, if any.

Thank you very much for your cooperation

Appendix 3 (B): the Arabic Version of the VLSQ

Vocabulary Learning Strategies Questionnaire

أستبيان حول أستراتيجيات تعلم المفردات

أخي الطالب، أختي الطالبة

يهدف هذا الأستبيان ألى الحصول على معلومات حول أستراتيجيات تعلم المفردات التي يستخدمها طلبة وطالبات أقسام اللغةالأنكليزية الدارسين بالجامعات الليبية.

يأمل الباحث، وهو طالب دكتوراة ليبي بجامعة نيوكاسل ببريطانيا، في استخدام هذه المعلومات في دراسة تهدف ألى التعرف على الدور الذي تلعبه استراتيجيات تعلم مفردات اللغة الآنجليزية في تطويرحصيلة مفردات الطلبة وكيفية استخدامهم لهذه المفردات.

بعد قراءة كل جملة من الجمل التالية والمتعلقة بتعلم المفردات أرجو أختيار الأجابة المناسبة التي تشير ألى مدى تكرار أستخدامك لكل أستراتيجية بغض النظر عن المهارة (أستماع، قراءة، محادثة أو كتابة) أو المكان (الجامعة أو البيت) الذي أستخدمت فيه. في حالة عدم أستخدام أستراتيجية ما أرجو وضع علامة تحت كلمة *(أطلاقاً)*، أما اذا سبق لك أستخدام أية أستراتيجية أرجو وضع علامة تحت أحدى الكلمات (نادراً، أحياناً، عادةً، غالباً أو دائماً) وذلك حسب نسبة تكرارك لأستخدامها. وهذه الكلمات تعني (أطلاقاً 0%، نادراً 20%، أحياناً 40%، عادةً 60%، غالباً 80%، دائماً 100%).

مثلاً أذا كنت تستخدم قاموس ثنائي اللغة (أنكليزي / عربي) في أغلب الأوقات (80%) عند تعلم المفردات أرجو وضع علامة تحت كلمة *(غالباً)* بهذه الكيفية:

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادةً 60%	غالباً 80%	دائماً 100%
				×	

أرجو وضع علامة تحت أحدى الكلمات (أطلاقاً، نادراً، أحياناً، عادةً، غالباً أو دائماً) التي تعبر عن *الأستراتيجية التي تستخدمها فعلاً*، وليست الأستراتيجية التي ينبغي أن تستخدمها، أو تريد أستخدامها علما بأنه لاتوجد أجابة صحيحة وأخرى خاطئة.

القسم الأول: معلومات عامة

أرجو الآجابة على هذه الآسئلة قبل الشروع في الآجابة على أسئلة الاستبيان.

1. الأسم: _____

2. الجنس: ذكر أنثى (ضع دائرة على واحدة)

3. العمر: _____ سنة

4. اللغة الأولى _____

5. كم عدد سنوات دراستك للغة الآنجليزية؟ _____ سنة

6. أذا درست اللغة الأنجليزية أو عشت في بلد لغة أهلها الأنجليزية أرجو ذكر الفترة الزمنية:

_____ سنة و _____ شهر.

7. أذا سبق لك دراسة أي لغة أجنبية أخرى غير الأنجليزية أرجو ذكر أسم اللغة ومدة دراستها

اللغة _____ مدة دراستها _____ سنة و _____ شهر.

القسم الثاني: أستراتيجيات تعلم المفردات

(1) أحدد صيغة الكلمة الجديدة (فعل، أسم، صفة) ليسهل معرفة معناها.

أطلاقا 0%	نادرا 20%	أحيانا 40%	عادة 60%	غالباً 80%	دائماً 100%

(2) أطلب من المدرس ترجمة الكلمة الجديدة ألى اللغة العربية.

أطلاقا 0%	نادرا 20%	أحيانا 40%	عادة 60%	غالباً 80%	دائماً 100%

(3) أرسم صورة ذهنية لمعنى الكلمة الجديدة.

أطلاقا 0%	نادرا 20%	أحيانا 40%	عادة 60%	غالباً 80%	دائماً 100%

(4) أكرر نطق الكلمة الجديدة عدة مرات.

أطلاقا 0%	نادرا 20%	أحيانا 40%	عادة 60%	غالباً 80%	دائماً 100%

(5) أحاول تطوير مفرداتي من خلال المحطات الفضائية الناطقة بالآنكليزية (أفلام، أغاني، أشرطة وثائقية) .

أطلاقا 0%	نادرا 20%	أحيانا 40%	عادة 60%	غالباً 80%	دائماً 100%

(6) أحاول تعلم الكلمة الجديدة من خلال تحليل اجزائها الرئيسية مثلاً (Un-safe-ly = Unsafely).

أطلاقا 0%	نادرا 20%	أحيانا 40%	عادة 60%	غالباً 80%	دائماً 100%

(7) أقوم بدراسة تهجئة الكلمة الجديدة.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(8) أقوم بدراسة صيغة الكلمة الجديدة (فعل، أسم، صفة) لكي اتذكرها.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(9) أحاول تطوير مفرداتي من خلال استخدام برامج الكمبيوتر (مثل تصفح الآنترنت).

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(10) أطلب من المدرس أن يشرح معنى الكلمة الجديدة.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(11) أقوم بربط الكلمة الجديدة بخبرات أو تجارب شخصية مررت بها مثلاً ربط كلمة research بمادة بحث التخرج. ا

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(12) أعيد كتابة الكلمة الجديدة عدة مرات.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(13) أبحث عن الكلمات العربية المشابهة للكلمة الآنكليزية الجديدة في اللفظ والمعنى.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(14) أحاول تطوير مفرداتي من خلال الآستماع لبرامج الأذاعة المسموعة الناطقة بالآنكليزية.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(15) أطلب من المدرس أعطاء جملة تحتوي على الكلمة الجديدة.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(16) أعيد صياغة معنى الكلمة المراد تعلمها بطريقة أخرى ليسهل تذكرها.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(17) أقوم بدراسة نطق الكلمة الجديدة.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(18) أقوم بربط الكلمة الجديدة بمثيلاتها (مثلاً كلمة تفاح بكلمة خوخ وبرتقال الخ).

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(19) أحاول تطوير مفرداتي من خلال قراءة الصحف والمجلات الصادرة بالآنكليزية.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(20) أستخدم قوائم المفردات لتعلم كلمات جديدة.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(21) أذا كنت تستخدم قوائم المفردات هل تطلب من المدرس مراجعتها للتأكد من دقتها.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(22) أحاول تحليل أي صور موجودة لمعرفة معنى الكلمة الجديدة.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(23) أحاول تحليل أي أيماءات أو اشارات لمعرفة معنى الكلمة الجديدة.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(24) أحاول مراجعة الكلمات الجديدة بعد التعرف عليها بمدة قصيرة.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(25) أستمرفي دراسة الكلمة الجديدة لفترة من الزمن.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(26) أحتفظ بكراسة للكلمات الجديدة لمراجعتها.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(27) اسأل زملاني الطلبة عن معنى الكلمة الجديدة.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(28) ألفظ الكلمة الجديدة بصوت عال عند دراستها.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(29) أحاول مراجعة الكلمات الجديدة تدريجيًا على فترات منفصلة.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(30) أربط الكلمة الجديدة بمرادفاتها واعكاسها.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(31) أتعلم كلمات العبارات الأصطلاحية (كالأمثال مثلاً) ككل.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(32) أكتشف المعاني الجديدة من خلال العمل في مجموعة مع الطلبة.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(33) أتصور شكل الكلمة الجديدة.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(34) أتجاهل الكلمة الجديدة في حالة القراءة مثلاً.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(35) أدوّن ملاحظات حول أي كلمة جديدة تعلمتها داخل الفصل.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(36) أستخدم قاموس ثنائي اللغة (انكليزي / عربي).

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(37) أستخدم قاموس ثنائي اللغة (عربي / انكليزي).

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(38) أدرس وأقوم بتدريبات على معاني الكلمات الجديدة من خلال العمل في مجموعة مع الطلبة.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(39) أحاول تقييم مستوى مفرداتي (مثلا بأجراء أختبارات مفردات).

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(40) أستخدم نظام التدرج لترسيخ معنى المفردات الجديدة التي تصف درجات تسلسلية مثل (ضخم، كبير، صغير).

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(41) أستخدم طريقة Keyword Method وهي تتمثل في أيجاد كلمة عربية قريبة في النطق من الكلمة الأنكليزية والقيام بخلق صورة ذهنية تجمع بين المفهومين مثلاً كلمة symbol بصورة سنبلة كرمز للخير.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(42) أستخدم قاموس أحادي اللغة (انكليزي/ انكليزي).

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(43) أحاول تخمين معنى الكلمة الجديدة من خلال السياق الذي وقعت فيه.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

(44) أقوم بأستخدام الكلمة الجديدة في جمل.

أطلاقا 0٪	نادرا 20%	أحيانا 40٪	عادة 60%	غالباً 80%	دائماً 100%

القسم الثالث

أرجو الآجابة على السؤالين الآتيين:

(1) أرجو تصنيف أهم عشر أستراتيجيات بالنسبة لك وذلك بكتابة أرقامهم في الفراغات حسب الأهمية

1	2	3	4	5	6	7	8	9	10

(2) أرجو أضافة أي أستراتيجيات أخرى سبق لك استخدامها ليست مذكورة أعلاه.

شكراً على تعاونكم

Coding the questionnaire

14	13	12	11	10	9	8	7	6	5	4	3	2	1	No/Category
					43	42	37	36	23	22	13	6	1	DET
														ANSWER 0-100
							38	32	27	21	15	10	2	SOC
														ANSWER 0-100
44	41	40	33	31	30	28	18	17	16	11	8	7	3	MEM
														ANSWER 0-100
									35	26	20	12	4	COG
														ANSWER 0-100
					39	34	29	25	24	19	14	9	5	MET
														ANSWER 0-100

Appendix 4 (A): the English Version of the Motivation Test

Motivation Test

Please read each statement, and then circle the number of the given choices (1 to 7) that mostly expresses the degree of your disagreement or agreement with each statement.

1. Studying English is important to me because it will allow me to be more at ease with people who speak English.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

2. Studying English is important to me only because I need it for my career.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

3. Studying English is important to me because I will be able to meet and talk to more kinds of people.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

4. Studying English is important to me because it will make me more knowledgeable.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

5. Studying English is important to me because I will be able to enjoy the films and books of the people who speak it better.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

6. Studying English is important to me because I think it will someday be useful in getting a good job.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

7. Studying English is important to me because I will be able to take part more freely in the activities of other cultural groups.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

8. Studying English is important to me because other people will respect me more if I know another language.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

Thank you for your cooperation

Appendix 4 (B): the Arabic Version of the Motivation Test

استبيان حول حوافز تعلم اللغة الإنجليزية

أرجو قراءة الجمل التالية ثم وضع دائرة حول رقم الخيار الذي يتناسب مع عدم أتفاقك أو أتفاقك مع الجملة.

1. دراسة اللغة الإنجليزية مهمة بالنسبة لي لأنها تجعلني أكثر تحرر من القلق والأرتباك مع الناس الذين يتكلمونها.

لاأوافق بشدة	لاأوافق بتوسط	لاأوافق بخفة	محايد	أوافق بخفة	اوافق بتوسط	أوافق بشدة
1	2	3	4	5	6	7

2. دراسة اللغة الأنجليزية مهمة بالنسبة لي فقط لأنني أحتاجها في مهنتي.

لاأوافق بشدة	لاأوافق بتوسط	لاأوافق بخفة	محايد	أوافق بخفة	اوافق بتوسط	أوافق بشدة
1	2	3	4	5	6	7

3. دراسة اللغة الأنجليزية مهمة بالنسبة لي لأنها ستمكنني من الألتقاء والتحدث الى أكثر أنواع من اللناس.

لاأوافق بشدة	لاأوافق بتوسط	لاأوافق بخفة	محايد	أوافق بخفة	اوافق بتوسط	أوافق بشدة
1	2	3	4	5	6	7

4. دراسة اللغة الأنجليزية مهمة بالنسبة لي لأنها ستجعلني مثقف أكثر.

لاأوافق بشدة	لاأوافق بتوسط	لاأوافق بخفة	محايد	أوافق بخفة	اوافق بتوسط	أوافق بشدة
1	2	3	4	5	6	7

5. دراسة اللغة الأنجليزية مهمة بالنسبة لي لأنها ستمكنني من الأستمتاع أفضل بأفلام وكتب الناس الذين يتكلمونها.

لاأوافق بشدة	لاأوافق بتوسط	لاأوافق بخفة	محايد	أوافق بخفة	اوافق بتوسط	أوافق بشدة
1	2	3	4	5	6	7

6. دراسة اللغة الأنجليزية مهمة بالنسبة لي لأنني أعتقد بأنه يوماً ما ستكون مفيدة في الحصول على عمل جيد.

لاأوافق بشدة	لاأوافق بتوسط	لاأوافق بخفة	محايد	أوافق بخفة	اوافق بتوسط	أوافق بشدة
1	2	3	4	5	6	7

7. دراسة اللغة الأنجليزية مهمة بالنسبة لي لأنها ستمكنني من أن أشارك بأكثر حرية في أي نشاطات متعلقة بمجموعات ثقافية أخرى.

لاأوافق بشدة	لاأوافق بتوسط	لاأوافق بخفة	محايد	أوافق بخفة	اوافق بتوسط	أوافق بشدة
1	2	3	4	5	6	7

8. دراسة اللغة الأنجليزية مهمة بالنسبة لي لأن الناس سيحترمونني أكثر أذا كنت أعرف لغة أخرى.

لاأوافق بشدة	لاأوافق بتوسط	لاأوافق بخفة	محايد	أوافق بخفة	اوافق بتوسط	أوافق بشدة
1	2	3	4	5	6	7

شكراً على تعاونكم

Appendix 5A: The Vocabulary Levels Test (VLT)

This is a vocabulary test. You must choose the right word to go with each meaning. Write the number of that word next to its meaning. Here is an example.

6. business
7. clock _____ part of a house
8. horse _____ animal with four legs
9. pencil _____ something used for writing
10. shoe
11. wall

You answer it in the following way

1. business
2. clock __6____ part of a house
3. horse __3____ animal with four legs
4. pencil __4____ something used for writing
5. shoe
6. wall

Some words are in the test to make it more difficult. You do not have to find a meaning for these words. In the example above, these words are *business, clock* and *shoe.* If you have no idea about the meaning of a word, do not guess. But if you think you might know the meaning, then you should try to find the answer.

The 2000-word level

1. birth
2. dust _____ game
3. operation _____ winning
4. row _____ being born
5. sport
6. victory

1. choice
2. crop _____ heat
3. flesh _____ meat
4. salary _____ money paid regularly for doing job
5. secret
6. temperature

1. cap
2. education _____ teaching and learning
3. journey _____ numbers to measure with
4. parent _____ going to a far place
5. scale
6. trick

1. attack
2. charm _____ gold and silver
3. lack _____ pleasing quality
4. pen _____ not having something
5. shadow
6. treasure

1. cream
2. factory _____ part of milk
3. nail _____ a lot of money
4. pupil _____ person who is studying
5. sacrifice
6. wealth

1. adopt
2. climb _____ go up
3. examine _____ look at closely
4. pour _____ be on every side
5. satisfy
6. surround

1. bake
2. connect _____ join together
3. inquire _____ walk without purpose
4. limit _____ keep within a certain size
5. recognize
6. wander

1. burst
2. concern _____ break open
3. deliver _____ make better
4. fold _____ take something to someone
5. improve
6. urge

1. original
2. private _____ first
3. royal _____ not public
4. slow _____ all added together
5. sorry
6. Total

1. brave
2. electric _____ commonly done
3. firm _____ wanting food
4. hungry _____ having no fear
5. local
6. usual

The 3000-word level

1. belt
2. climate _____ idea
3. executive _____ inner surface of your hand
4. notion _____ strip of leather worn around the wrest
5. palm
6. victim

1. acid
2. bishop _____ cold feeling
3. chill _____ farm animal
4. ox _____ organization or framework
5. ridge
6. structure

1. bench
2. charity _____ long seat
3. jar _____ help to the poor
4. mate _____ part of a country
5. mirror
6. province

1. boot
2. device _____ army officer
3. lieutenant _____ a kind of stone
4. marble _____ tube through which blood flows
5. phrase
6. vein

1. apartment
2. candle _____ a place to live
3. draft _____ chance of something happening
4. horror _____ first rough form of something written
5. prospect
6. timber

1. betray
2. dispose _____ frighten
3. embrace _____ say publicly
4. injure _____ hurt seriously
5. proclaim
6. scare

1. encounter
2. illustrate _____ meet
3. inspire _____ beg or help
4. plead _____close completely
5. seal
6. shift

1. assist
2. bother _____ help
3. condemn _____ cut neatly
4. erect _____ spin around quickly
5. trim
6. whirl

1. annual
2. concealed _____ wild
3. definite _____ clear and certain
4. mental _____ happening once a year
5. previous
6. savage

1. dim
2. junior _____ strange
3. magnificent _____ wonderful
4. maternal _____ not clearly lit
5. odd
6. weary

The 5000-word level

1. balloon
2. federation _____ bucket
3. novelty _____ unusual interesting thing
4. pail _____ rubber bag that is filled with air
5. veteran
6. ward

1. alcohol
2. apron _____ stage of development
3. hip _____ state of untidiness or dirtiness
4. lure _____ cloth worn in front to protect your clothes
5. mess
6. phase

1. apparatus
2. compliment _____ expression of admiration
3. ledge _____ set of instruments or machinery
4. mortgage _____ money raised from a bank
5. scrap
6. tile

1. bulb
2. document _____ female horse
3. legion _____ a large group of soldiers or people
4. mare _____ a paper that provides information
5. pulse
6. tub

1. concrete
2. era _____ circular shape
3. fibre _____ top of a mountain
4. loop _____ a long period of time
5. plank
6. summit

1. blend
2. devise _____ mix together
3. hug _____ plan or invent
4. lease _____ hold tightly in your arms
5. plague
6. reject

1. abolish
2. drip _____ bring to an end by law
3. insert _____ guess about the future
4. predict _____ calm or comfort someone
5. soothe
6. thrive

1. bleed
2. collapse _____ come before
3. precede _____ fall down suddenly
4. reject _____ move with quick steps and jumps
5. skip
6. tease

1. causal
2. desolate _____ sweet-smelling
3. fragrant _____ only one of its kind
4. radical _____ good for your health
5. unique
6. wholesome

1. gloomy
2. gross _____ empty
3. infinite _____ dark or sad
4. limp _____ without end
5. slim
6. vacant

Academic Vocabulary

1. benefit
2. labour _____ work
3. percent _____ part of 100
4. principle _____ general idea used to guide one's actions
5. source
6. survey

1. element
2. fund _____ money for special purpose
3. layer _____ skilled way of doing something
4. philosophy _____ study of the meaning of life
5. proportion
6. technique

1. consent
2. enforcement _____ Total
3. investigation _____ agreement or permission
4. parameter _____ trying to find information about something
5. sum
6. trend

1. decade
2. fee _____ 10 years
3. file _____ subject of a discussion
4. incidence _____ money paid for service
5. perspective
6. topic

1. colleague
2. erosion _____ action against the law
3. format _____ wearing away gradually
4. inclination _____ shape or size of something
5. panel
6. violation

1. achieve
2. conceive _____ change
3. grant _____ connect together
4. link _____ finish successfully
5. modify
6. offset

1. convert
2. design _____ keep out
3. exclude _____ stay alive
4. facilitate _____ change from one thing into another
5. indicate
6. survive

1. anticipate
2. compile _____ control something skilfully
3. convince _____ expect something will happen
4. denote _____ produce books and newspapers
5. manipulate
6. publish

1. equivalent
2. financial _____ most important
3. forthcoming _____ concerning sight
4. primary _____ concerning money
5. random
6. visual

1. alternative
2. ambiguous _____ last or most important
3. empirical _____ something different that can be chosen
4. ethnic _____ concerning people from a certain nation
5. mutual
6. ultimate

THANK YOU FOR YOUR COOPERATION

Appendix 5B: the Vocabulary Size Test of Controlled Productive Ability (CPA)

This is a levels test of productive vocabulary. Complete the underlined words.

The example has been done for you.

He was riding a *bicycle*.

The 2000-word level

1. I'm glad we had this opp_____ to talk.
2. There are a doz_____ eggs in the basket.
3. Every working person must pay income t_____.
4. The pirates buried the trea _____ on a desert island.
5. Her beauty and cha_____ had a powerful effect on men.
6. La_____ of rain led to shortage of water in the city.
7. He takes cr_____ and sugar in his coffee.
8. The rich man died and left all his we_____ to his son.
9. Pup_____ must hand in their papers by the end of the week.
10. This sweater is too tight. It needs to be stret_____.
11. Ann intro_____ her boyfriend to her mother.
12. Teenagers often adm_____ and worship pop singers.
13. If you blow up that balloon any more it will bur_____.
14. In order to be accepted into the university, he had to impr_____ his grades.
15. The telegram was deli_____ two hours after it had been sent.
16. The differences were so sl_____ that they went unnoticed.
17. The dress you're wearing is lov_____.
18. He wasn't very popu_____ when he was a teenager, but he has many friends now.

The3000-word level

1. He has a successful car_____ as a lawyer.
2. The thieves threw ac_____ in his face and made him blind.3. To improve the country's economy, the government decided on economic ref_____.
4. She wore a beautiful green go_____ to the ball.
5. The government tried to protect the country's industry by reducing the imp_____

of cheap goods.

6. The children's games were funny at first, but finally got on the parents' ner_____.
7. The lawyer gave some wise coun_____ to his client.
8. Many people in England mow the la_____ of their houses on Sunday morning.
9. The farmer sells the eggs that his he_____ lays.
10. Sudden noises at night sca_____ alot.
11. France was proc_____ a republic in the 18th century.
12. Many people are inj_____ in road accidents every year.
13. Suddenly he was thru_____ into the dark room.
14. He perc_____ a light at the end of the tunnel.
15. Children are not independent. They are att_____ to their parents.
16. She showed off her sle_____ figure in a long narrow dress.
17. She has been changing partners often because she cannot have a st_____ relationship with one person.
18. You must wear a bathing suit on a public beach. You are not allowed to be na_____.

The 5000-word level

1. Soldiers usually swear an oa_____ of loyalty to their country.
2. The voter placed the ball_____ in the box.
3. They keep their valuables in a vau_____ at the bank.
4. A bird perched at the window led_____.
5. The kitten is playing with a ball of ya_____ .
6. The thieves have forced an ent_____ into the building.
7. The small hill was really a burial mou_____.
8. We decided to celebrate New Year's E_____ together.
9. The soldier was asked to choose between infantry and cav_____.
10. This is a complex problem which is difficult to compr_____.
11. An angry crowd sho_____ the prisoner as he was leaving the court.
12. Don't pay attention to this rude remark just ign_____ it.
13. The management held a secret meeting. The issues discussed were not disc_____ to the workers.
14. We could hear the sergeant bel_____ commands to the troops.

15. The boss got angry with the secretary and it took a lot of tact to soo_____ him.
16. We do not have adeq_____ information to make a decision.
17. She is not a child, but a mat_____ woman. She can make her own decisions.
18. The prisoner was put in soli_____ confinement.

The University Word List level

1. There has been a recent tr_____ among prosperous families towards a smaller number of children.
2. The ar_____ of his office is 25 square meters.
3. Phil_____ examines the meaning of life.
4. According to the communist doc_____, workers should rule the world.
5. Spending many years together deepened their inti_____.
6. He usually read the sport sec_____ of the newspaper first.
7. Because of the doctors' strike the cli_____ is closed today.
8. There are several misprints on each page of this te_____.
9. The suspect had both opportunity and mot_____ to commit the murder.
10. They insp_____ all products before sending them out to stores.
11. A considerable amount of evidence was accum_____ during the investigation.
12. The victim's shirt was satu_____ with blood.
13. He is irresponsible. You cannot re_____ on him for help.
14. It's impossible to eva_____ these results without knowing about the research methods that were used.
15. He finally att_____ a position of power in the company.
16. The story tells us about a crime and subs_____ punishment.
17. In a hom_____ class all students are of a similar proficiency.
18. The urge to survive is inh_____ in all creatures.

Appendix 5C: The Vocabulary Size Test of Free Productive Ability (FPA)

In this test you are kindly requested to write down all the words you know about the following two topics: (1) Parts of the body, (2) Learning and teaching English. If you think you might know a word, then you should try to write it. Do not worry about spelling mistakes.

1. **Parts of the body:** for example, *head*...

2. **Learning and teaching English:** for example, *student*...

Appendix 6: Interview Questions

The interview questions were divided into two parts: part one seeks information about interviewees' general feelings about vocabulary as an aspect of learning a language; part two deals with the items of the Vocabulary Learning Strategies Questionnaire VLSQ.

Part One

1. Do you think you are a good learner?
2. Do you find vocabulary useful?
3. Do you have any problems related to vocabulary in all skills?
4. What difficulties do you face in learning vocabulary?
5. How important is vocabulary in communication for you?
6. Do you pay enough attention to vocabulary acquisition outside class or rely mainly on the subject material.
7. What aspects of word knowledge do you focus on, i.e. which are the most important aspects for you?
8. What do you think of vocabulary learning strategies (VLS), helpful, not helpful, should be taught, easy to use etc?
9. Have you received any training of how to use these strategies inside or outside class?

Part Two

Having their copies of the VLSQ during the interview, interviewees were asked two main questions:

1. If you use any of the following VLS, explain: when (time, and sequence of strategies), and how do you use each strategy in different skills?

2. If you do not use any of the VLS, explain: why do not you use certain strategies (e.g. keyword method) although they are recommended as useful learning strategies?

The following were the main strategies students were asked about:

- **Discovery Strategies**

1. DET. I identify the part of speech of the new word to help me know its meaning.
2. SOC. I ask a teacher for translation of the new word into Arabic.
7. DET. I break the new word up into the main parts to learn it (un-safe-ly = unsafely).
10. SOC. I ask a teacher for a paraphrase of the new word.

13. DET. I check for Arabic words that are similar in form and meaning to the new word.
15. SOC. I ask a teacher for a sentence including the new word.
27. SOC. I ask classmates for the meaning of the new word.
32. SOC. I discover new meanings through group work activity.
36. DET. I use a bilingual dictionary (English / Arabic).
37. DET. I use a bilingual dictionary (Arabic / English).
42. DET. I use a monolingual Dictionary (English / English).
43. DET. I guess from textual context in reading.

- **Consolidating Strategies**

4. COG. I repeat the new word over and over.
5. MET. I try to develop my vocabulary knowledge by watching English TV channels.
9. MET. I try to develop my vocabulary knowledge by using computer programs.
11. MEM. I connect the new word to a personal experience.
12. COG. I write the new word many times.
13. MET. I try to develop my vocabulary knowledge by listening to English radio programs
19. MET. I try to develop my vocabulary knowledge by reading English newspapers and magazines.
20. COG. I make my own lists of new words.
1. MET. I revise the newly learned words soon after the initial meeting.
26. COG. I keep a vocabulary notebook.
29. MET. I revise the newly learned words using spaced repetition.
31. MEM. I learn the words of an idiom together.
35. COG. I take notes of the newly learned words in class.
38. SOC. I study and practice meaning of the new words in a group of students.
39. MET. I try to assess my vocabulary knowledge (e.g. with word tests).
40. MEM. I use the Keyword Method.
41. MEM. I use the new word in sentences.

They were also allowed to express their opinions about any strategy either covered or not covered in the questionnaire as well as any inquiry about the study in general.

Appendix 7: Student Interviewees' Scores in VLT, CPA and FPA

- **High vocabulary knowledge (HVK) students**

VLT scores (Maximum at each level 30 and Total 120)

Frequency Levels	HVK Students					Mean	Mean %
	M1	R1	F1	B1	A1		
2000VLT	30	30	25	29	25	27.8	92.6
3000VLT	28	25	28	25	28	26.8	89.3
5000VLT	21	19	22	21	21	20.8	69.3
UWLVLT	24	24	16	16	15	19	63.3
TotalVLT	103	98	91	91	89	94.4	78.6

- **Moderate vocabulary knowledge (MVK) students**

VLT scores (Maximum at each level 30 and Total 120)

Frequency Levels	MVK Students					Mean	Mean %
	W2	F2	A2	S2	N2		
2000VLT	17	24	18	21	18	19.6	65.3
3000VLT	15	12	11	10	11	11.8	39.3
5000VLT	09	04	06	04	07	6.0	20
UWLVLT	14	11	14	12	11	12.4	41.3
TotalVLT	55	51	49	47	47	49.8	41.5

- **Low vocabulary knowledge (LVK) students**

VLT scores (Maximum at each level 30 and Total 120)

Frequency Levels	LVK Students					Mean	Mean %
	S3	A3	N3	L3	M3		
2000VLT	16	10	08	13	11	11.6	38.6
3000VLT	03	06	03	05	02	03.8	12.6
5000VLT	00	04	06	01	00	2.2	7.3
UWLVLT	06	07	05	00	04	4.4	14.6
TotalVLT	27	27	22	19	17	22.4	18.6

- **High vocabulary knowledge (HVK) students**

CPA scores (Maximum at each level 18 and Total 72)

Frequency Levels	HVK Students					Mean	Mean %
	M1	R1	F1	B1	A1		
2000CPA	15	12	10	09	10	11.2	62.2
3000CPA	09	08	10	10	11	9.6	53.3
5000CPA	04	04	03	04	00	3.00	16.6
UWLCPA	08	06	09	10	00	6.6	36.6
TotalCPA	36	30	32	33	21	30.4	42.2

- **Moderate vocabulary knowledge (MVK) students**

CPA scores (Maximum at each level 18 and Total 72)

Frequency Levels	MVK Students					Mean	Mean %
	W2	F2	A2	S2	N2		
2000CPA	03	05	08	05	04	5.0	27.7
3000CPA	06	04	04	04	04	4.4	24.4
5000CPA	00	01	00	01	02	0.8	4.4
UWLCPA	02	07	03	05	04	4.2	23.3
TotalCPA	11	17	15	15	14	14.4	20.0

- **Low vocabulary knowledge (LVK) students**

CPA scores (Maximum at each level 18 and Total 72)

Frequency Levels	LVK Students					Mean	Mean %
	S3	A3	N3	L3	M3		
2000CPA	07	02	03	05	05	4.4	24.4
3000CPA	04	02	02	02	02	2.4	13.3
5000CPA	00	00	00	00	00	00	00
UWLCPA	04	01	00	03	00	1.6	8.8
TotalCPA	15	05	05	10	07	8.4	11.6

- **High vocabulary knowledge (HVK) students**

FPA scores

Test	HVK Students					Mean
	M1	R1	F1	B1	A1	
1st topic FPA	33	26	21	09	10	19.8
2nd topic FPA	39	24	15	09	19	21.2
TotalFPA	72	50	36	18	29	41

- **Moderate vocabulary knowledge (MVK) students**

FPA scores

Test	MVK Students					Mean
	W2	F2	A2	S2	N2	
1st topic FPA	18	18	25	11	15	17.4
2nd topic FPA	21	17	35	27	13	22.6
TotalFPA	39	35	60	38	28	40

- **Low vocabulary knowledge (LVK) students**

FPA scores

Test	LVK Students					Mean
	S3	A3	N3	L3	M3	
1st topic FPA	12	11	18	15	13	13.4
2nd topic FPA	20	09	11	11	11	12.4
TotalFPA	32	20	29	26	24	26.2

Appendix 8: Descriptive Statistics for Vocabulary Tests Scores:

- **Vocabulary Levels Test (VLT)**
- **Vocabulary Size Test of Controlled Productive Ability (CPA)**
- **Vocabulary Size Test of Free Productive Ability (FPA)**
  - **Group A**

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
VLT2000	56	7.00	30.00	19.0179	6.40310
VLT3000	56	2.00	28.00	12.5893	7.15739
VLT5000	56	.00	22.00	6.4643	5.96646
VLTACAD	56	.00	24.00	9.4464	6.17891
VLTTOTAL	56	16.00	103.00	47.7143	23.29472
CPA2000	56	.00	15.00	6.6607	3.57403
CPA3000	56	.00	11.00	4.2143	2.47691
CPA5000	56	.00	4.00	.8036	1.16650
CPAACAD	56	.00	10.00	3.2857	2.74832
CPATOTAL	56	.00	36.00	14.9643	8.62758
FPABODY	56	7.00	36.00	16.1250	6.58666
FPAENGLISH	56	2.00	39.00	16.6071	7.97651
FPATOTAL	56	12.00	72.00	32.7321	12.31775
Valid N (listwise)	56				

  - **Group B**

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
VLT2000	56	1.00	26.00	11.6429	4.69208
VLT3000	56	.00	17.00	5.3214	3.55276
VLT5000	56	.00	11.00	1.9107	2.63043
VLTACAD	56	.00	16.00	4.4643	4.09418
VLTTOTAL	56	3.00	62.00	23.3393	12.14051
CPA2000	56	.00	11.00	3.5536	2.35812
CPA3000	56	.00	5.00	1.6964	1.37404
CPA5000	56	.00	3.00	.3929	.73059
CPAACAD	56	.00	7.00	1.5357	1.72642
CPATOTAL	56	.00	23.00	7.1786	4.92898
FPABODY	56	3.00	27.00	11.6786	4.84714
FPAENGLISH	56	2.00	28.00	10.1786	5.83440
FPATOTAL	56	5.00	55.00	21.8571	9.74293
Valid N (listwise)	56				

Appendix 9: Descriptive Statistics for Motivation Scores

1. Group A

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
integ.mot	52	11.00	28.00	23.0577	4.36301
instr.mot	52	8.00	28.00	20.0769	5.23879
total.mot	52	26.00	54.00	43.1346	6.93960
Valid N (listwise)	52				

2. Group B

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
integ.mot	49	18.00	28.00	24.9592	2.95775
instr.mot	49	10.00	28.00	22.2245	4.40769
total.mot	49	37.00	56.00	47.3878	5.72573
Valid N (listwise)	49				

Appendix 10: VLS correlated with Vocabulary Knowledge

Table 1: VLS correlated with receptive vocabulary knowledge (VLT)

VLS used by Group A (GA) and Group B (GB)	Mean scores		Correlation Type positive/ negative	
	Group A	Group B	Group A	Group B
DET identifying part of speech	57	53	X	Positive
DET checking for L1 cognate	38	46	Negative	X
DET using English/Arabic dictionary	76	86	Negative	X
DET using Arabic/ English dictionary	33	66	Negative	X
DET guessing meaning from context	81	73	Positive	X
SOC asking classmate for meaning	60	60	X	Negative
MEM paraphrase the word's meaning	55	54	Negative	X
MEM study the sound of the word	55	65	X	Positive
MEM learn words of an idiom together	46	51	Positive	Positive
MEM make image of the form of the word	45	45	X	Positive
MEM use scales for gradable adjectives	27	39	Negative	X
MEM use Keyword Method	22	34	Negative	X
MEM using the word in sentences	49	52	Positive	X
COG keeping vocabulary notebook	34	56	Negative	X
COG making own lists of words	39	49	Positive	X
COG taking notes of the words in class	37	49	X	Positive
MET reading English newspapers and magazines	38	51	Positive	X
MET listening to radio programmes	45	61	X	Positive

Table 2: VLS correlated with controlled productive knowledge (CPA)

VLS used by Group A (GA) and Group B (GB)	Mean scores		Correlation Type positive/ negative	
	Group A	Group B	Group A	Group B
DET identifying part of speech	57	53	Positive	Positive
DET breaking word up into main parts	52	47	Negative	X
DET using English/Arabic dictionary	76	86	Negative	X
DET using monolingual dictionaries	63	56	Positive	X
DET guessing meaning from context	81	73	Positive	X
SOC asking classmate for meaning	60	60	X	Negative
SOC discovering meaning through group work	44	52	X	Negative
MEM paraphrase the word's meaning	55	54	Negative	X
MEM learn words of an idiom together	46	51	Positive	X
MEM make image of the form of the word	45	45	X	Positive
MEM use scales for gradable adjectives	27	39	Negative	X
COG writing the word many times	59	62	Negative	X
COG keeping vocabulary notebook	34	56	Negative	X
COG making own lists of words	39	49	Positive	X
COG taking notes of the words in class	37	49	Negative	X
MET using computer programs	29	49	Positive	X
MET reading English newspapers and magazines	38	51	Positive	X

Table 3: VLS correlated with free productive knowledge (FPA)

VLS used by Group A (GA) and Group B (GB)	Mean scores		Correlation Type positive/ negative	
	Group A	Group B	Group A	Group B
DET identifying part of speech	57	53	Positive	X
DET using English/Arabic dictionary	76	86	Negative	X
DET using monolingual dictionaries	63	57	Positive	X
DET guessing meaning from context	81	73	Positive	Positive
SOC Asking teacher for a sentence including the new word	22	25	Positive	X
SOC asking classmate for meaning	60	60	X	Negative
SOC ask teacher for paraphrase	40	39	Negative	X
MEM paraphrase the meaning of the word	55	54	Negative	X
MEM Study part of speech	54	54	Positive	X
MEM learn words of an idiom together	46	51	Positive	Positive
MEM make image of the form of the word	45	45	X	Positive
MEM study the sound of the word	55	65	X	Positive
MET using computer programs	29	49	Positive	X
MET skipping the new word	26	28	Positive	X

Appendix 11: Mann-Whitney test comparing the two groups' mean scores at the five categories of VLS.

1. Determination Strategies

Ranks

	Group A and Group B	N	Mean Rank	Sum of Ranks
identify part of speech	Group B	49	49.27	2414.00
	Group A	52	52.63	2737.00
	Total	101		
break word into main parts	Group B	49	49.21	2411.50
	Group A	52	52.68	2739.50
	Total	101		
check for L1 cognate	Group B	49	54.82	2686.00
	Group A	52	47.40	2465.00
	Total	101		
analyze available pictures	Group B	49	50.47	2473.00
	Group A	52	51.50	2678.00
	Total	101		
analyze available gestures	Group B	49	50.68	2483.50
	Group A	52	51.30	2667.50
	Total	101		
use English Arabic dictionary	Group B	49	56.67	2777.00
	Group A	52	45.65	2374.00
	Total	101		
use Arabic English dictionary	Group B	49	64.18	3145.00
	Group A	52	38.58	2006.00
	Total	101		
use monolingual dictionary	Group B	49	48.86	2394.00
	Group A	52	53.02	2757.00
	Total	101		
guess meaning from context	Group B	49	46.73	2290.00
	Group A	52	55.02	2861.00
	Total	101		

Test Statistics[a]

	identify part of speech	break word into main parts	check for L1 cognate	analyze available pictures	analyze available gestures	use English Arabic dictionary	use Arabic English dictionary	use monolingual dictionary	guess meaning from context
Mann-Whitney U	1189.000	1186.500	1087.000	1248.000	1258.500	996.000	628.000	1169.000	1065.000
Wilcoxon W	2414.000	2411.500	2465.000	2473.000	2483.500	2374.000	2006.000	2394.000	2290.000
Z	-.588	-.604	-1.292	-.180	-.107	-2.033	-4.483	-.728	-1.487
Asymp. Sig. (2-tailed)	.557	.546	.196	.857	.914	.042	.000	.467	.137

a. Grouping Variable: Group A and Group B

2. Social Strategies

Ranks

	Group A and Group B	N	Mean Rank	Sum of Ranks
ask teacher for translation	Group B	49	59.05	2893.50
	Group A	52	43.41	2257.50
	Total	101		
ask teacher for paraphrase of the word	Group B	49	50.56	2477.50
	Group A	52	51.41	2673.50
	Total	101		
ask teacher for sentence including word	Group B	49	52.79	2586.50
	Group A	52	49.32	2564.50
	Total	101		
ask teacher to check accuracy of word lists	Group B	49	56.28	2757.50
	Group A	52	46.03	2393.50
	Total	101		
ask classmate for meaning	Group B	49	50.59	2479.00
	Group A	52	51.38	2672.00
	Total	101		
discover meaning through group work	Group B	49	54.60	2675.50
	Group A	52	47.61	2475.50
	Total	101		
study and practice mening in a group	Group B	49	53.71	2632.00
	Group A	52	48.44	2519.00
	Total	101		

Test Statistics[a]

	ask teacher for translation	ask teacher for paraphrase of the word	ask teacher for sentence including word	ask teacher to check accuracy of word lists	ask classmate for meaning	discover meaning through group work	study and practice mening in a group
Mann-Whitney U	879.500	1252.500	1186.500	1015.500	1254.000	1097.500	1141.000
Wilcoxon W	2257.500	2477.500	2564.500	2393.500	2479.000	2475.500	2519.000
Z	-2.755	-.150	-.627	-2.024	-.139	-1.219	-.932
Asymp. Sig. (2-tailed)	.006	.881	.531	.043	.889	.223	.352

a. Grouping Variable: Group A and Group B

- **Memory Strategies**

Ranks

	Group A and Group B	N	Mean Rank	Sum of Ranks
make picture of word meaning	Group B	49	54.04	2648.00
	Group A	52	48.13	2503.00
	Total	101		
study spelling	Group B	49	54.67	2679.00
	Group A	52	47.54	2472.00
	Total	101		
study part of speech	Group B	49	51.18	2508.00
	Group A	52	50.83	2643.00
	Total	101		
connect to personal experience	Group B	49	50.67	2483.00
	Group A	52	51.31	2668.00
	Total	101		
paraphrase the word's meaning	Group B	49	50.04	2452.00
	Group A	52	51.90	2699.00
	Total	101		
study the sound of the word	Group B	49	55.65	2727.00
	Group A	52	46.62	2424.00
	Total	101		
assosiate word with its coordinates	Group B	49	53.70	2631.50
	Group A	52	48.45	2519.50
	Total	101		
say word aloud	Group B	49	52.06	2551.00
	Group A	52	50.00	2600.00
	Total	101		
connect word to synonyms and antonyms	Group B	49	51.45	2521.00
	Group A	52	50.58	2630.00
	Total	101		
learn words of an idiom together	Group B	49	53.17	2605.50
	Group A	52	48.95	2545.50
	Total	101		
make image of the form of the word	Group B	49	51.08	2503.00
	Group A	52	50.92	2648.00
	Total	101		
use scales for gradable adjectives	Group B	49	58.12	2848.00
	Group A	52	44.29	2303.00
	Total	101		
use keyword method	Group B	49	57.79	2831.50
	Group A	52	44.61	2319.50
	Total	101		
use word in sentences	Group B	49	52.54	2574.50
	Group A	52	49.55	2576.50
	Total	101		

Test Statistics[a]

	say word aloud	connect word to synonyms and antonyms	learn words of an idiom together	make image of the form of the word	use scales for gradable adjectives	use keyword method	use word in sentences
Mann-Whitney U	1222.000	1252.000	1167.500	1270.000	925.000	941.500	1198.500
Wilcoxon W	2600.000	2630.000	2545.500	2648.000	2303.000	2319.500	2576.500
Z	-.360	-.153	-.739	-.028	-2.448	-2.363	-.521
Asymp. Sig. (2-tailed)	.719	.878	.460	.978	.014	.018	.603

a. Grouping Variable: Group A and Group B

Test Statistics[a]

	make picture of word meaning	study spelling	study part of speech	connect to personal experience	paraphrase the word's meaning	study the sound of the word	assosiate word with its coordinates
Mann-Whitney U	1125.000	1094.000	1265.000	1258.000	1227.000	1046.000	1141.500
Wilcoxon W	2503.000	2472.000	2643.000	2483.000	2452.000	2424.000	2519.500
Z	-1.030	-1.247	-.063	-.111	-.325	-1.579	-.918
Asymp. Sig. (2-tailed)	.303	.212	.950	.912	.745	.114	.359

a. Grouping Variable: Group A and Group B

3. Cognitive Strategies

Ranks

	Group A and Group B	N	Mean Rank	Sum of Ranks
repeate the word over and over	Group B	49	54.73	2682.00
	Group A	52	47.48	2469.00
	Total	101		
write the word many times	Group B	49	52.64	2579.50
	Group A	52	49.45	2571.50
	Total	101		
make my own lists of words	Group B	49	54.98	2694.00
	Group A	52	47.25	2457.00
	Total	101		
keep vocabulary notebook	Group B	49	59.40	2910.50
	Group A	52	43.09	2240.50
	Total	101		
take notes in class	Group B	49	55.92	2740.00
	Group A	52	46.37	2411.00
	Total	101		

Test Statistics[a]

	repeate the word over and over	write the word many times	make my own lists of words	keep vocabulary notebook	take notes in class
Mann-Whitney U	1091.000	1193.500	1079.000	862.500	1033.000
Wilcoxon W	2469.000	2571.500	2457.000	2240.500	2411.000
Z	-1.286	-.557	-1.348	-2.845	-1.671
Asymp. Sig. (2-tailed)	.198	.577	.178	.004	.095

a. Grouping Variable: Group A and Group B

4. Metacognitive Strategies

Ranks

	Group A and Group B	N	Mean Rank	Sum of Ranks
watch English TV channels	Group B	49	49.66	2433.50
	Group A	52	52.26	2717.50
	Total	101		
use computer programs	Group B	49	58.88	2885.00
	Group A	52	43.58	2266.00
	Total	101		
listen to radio	Group B	49	58.53	2868.00
	Group A	52	43.90	2283.00
	Total	101		
read newspaper	Group B	49	56.73	2780.00
	Group A	52	45.60	2371.00
	Total	101		
revise words soom after initial meeting	Group B	49	54.38	2664.50
	Group A	52	47.82	2486.50
	Total	101		
continue to study the word over time	Group B	49	56.73	2780.00
	Group A	52	45.60	2371.00
	Total	101		
revise words using spaced repetition	Group B	49	57.52	2818.50
	Group A	52	44.86	2332.50
	Total	101		
skip the new word	Group B	49	51.64	2530.50
	Group A	52	50.39	2620.50
	Total	101		
assess vocabulary knowledge	Group B	49	56.30	2758.50
	Group A	52	46.01	2392.50
	Total	101		

Test Statistics[a]

	watch English TV channels	use computer programs	listen to radio	read newspaper	revise words soom after initial meeting	continue to study the word over time	revise words using spaced repetition	skip the new word	assess vocabulary knowledge
Mann-Whitney U	1208.500	888.000	905.000	993.000	1108.500	993.000	954.500	1242.500	1014.500
Wilcoxon W	2433.500	2266.000	2283.000	2371.000	2486.500	2371.000	2332.500	2620.500	2392.500
Z	-.457	-2.688	-2.547	-1.943	-1.147	-1.947	-2.214	-.223	-1.825
Asymp. Sig. (2-tailed)	.648	.007	.011	.052	.251	.052	.027	.824	.068

a. Grouping Variable: Group A and Group B

Appendix 12: Mann-Whitney test comparing the two groups' scores at Vocabulary tests: VLT, CPA and FPA.

Ranks

	Group A and Group B	N	Mean Rank	Sum of Ranks
twoVLT	Group B	56	39.00	2184.00
	Group A	56	74.00	4144.00
	Total	112		
threeVLT	Group B	56	38.47	2154.50
	Group A	56	74.53	4173.50
	Total	112		
fiveVLT	Group B	56	42.14	2360.00
	Group A	56	70.86	3968.00
	Total	112		
UWLVLT	Group B	56	42.71	2391.50
	Group A	56	70.29	3936.50
	Total	112		
totalVLT	Group B	56	37.55	2103.00
	Group A	56	75.45	4225.00
	Total	112		
twoCPA	Group B	56	41.25	2310.00
	Group A	56	71.75	4018.00
	Total	112		
threeCPA	Group B	56	38.39	2150.00
	Group A	56	74.61	4178.00
	Total	112		
fiveCPA	Group B	56	51.44	2880.50
	Group A	56	61.56	3447.50
	Total	112		
UWLCPA	Group B	56	45.17	2529.50
	Group A	56	67.83	3798.50
	Total	112		
totalCPA	Group B	56	39.53	2213.50
	Group A	56	73.47	4114.50
	Total	112		
bodyFPA	Group B	56	44.90	2514.50
	Group A	56	68.10	3813.50
	Total	112		
englishFPA	Group B	56	42.76	2394.50
	Group A	56	70.24	3933.50
	Total	112		
totalFPA	Group B	56	41.53	2325.50
	Group A	56	71.47	4002.50
	Total	112		

- **Vocabulary Levels Test (VLT)**

Test Statistics[a]

	twoVLT	threeVLT	fiveVLT	UWLVLT	totalVLT
Mann-Whitney U	588.000	558.500	764.000	795.500	507.000
Wilcoxon W	2184.000	2154.500	2360.000	2391.500	2103.000
Z	-5.713	-5.888	-4.745	-4.515	-6.177
Asymp. Sig. (2-tailed)	.000	.000	.000	.000	.000

a. Grouping Variable: Group A and Group B

Vocabulary Size Test of Controlled Productive Ability (CPA)

Test Statistics[a]

	twoCPA	threeCPA	fiveCPA	UWLCPA	totalCPA
Mann-Whitney U	714.000	554.000	1284.500	933.500	617.500
Wilcoxon W	2310.000	2150.000	2880.500	2529.500	2213.500
Z	-4.996	-5.987	-1.950	-3.762	-5.540
Asymp. Sig. (2-tailed)	.000	.000	.051	.000	.000

a. Grouping Variable: Group A and Group B

- **Vocabulary Size Test of Free Productive Ability (FPA)**

Test Statistics[a]

	bodyFPA	englishFPA	totalFPA
Mann-Whitney U	918.500	798.500	729.500
Wilcoxon W	2514.500	2394.500	2325.500
Z	-3.791	-4.485	-4.883
Asymp. Sig. (2-tailed)	.000	.000	.000

a. Grouping Variable: Group A and Group B

Appendix 13: Word types written in the FPA Test.

1. **1st topic: Parts of the body**

- **Group A (60 words)**

Eye, nose, face, cheek, back, mouth, belly, foot, hand, finger, teeth, leg, shoulder, arm, kidney, heart, lips, vocal-cords, hair, ear, bones, forehead, neck, stomach, tongue, nails, breast, knee, blood, brain, nervous system, belly, palate, jaw, lever, windpipe, beard, skeleton, velum, rib, back bone, pupil, eyelashes, eyebrow, throat, bum, flesh, toe, skin, palm, muscles, vein, cell, tissues, abdomen, penis, vagina, wrist, elbow, lobe.

- **Group B (47 words)**

Eye, nose, face, cheek, back, mouth, belly, foot, hand, finger, teeth, leg, shoulder, arm, kidney, heart, lips, vocal-cords, hair, ear, bones, forehead, neck, stomach, tongue, nails, breast, knee, blood, brain, nervous system, belly, palate, jaw, lever, bowls, respiratory system, white blood cells, red blood cells, digestive system, blood vessels, colon, larynx, ass, urinary system, ridge, nasal cavity.

- **Both Groups (72 words)**

Eye, nose, face, cheek, back, mouth, belly, foot, hand, finger, toe, teeth, leg, shoulder, arm, rib, kidney, heart, lips, vocal-cords, hair, ear, bones, backbone, pupil, forehead, neck, eyelashes, stomach, eyebrow, tongue, throat, bum, nails, flesh, breast, knee, blood, skin, palm, brain, mussels, vein, cell, nervous system, tissues, abdomen, belly, penis, vagina, wrist, palate, elbow, lobe, jaw, lever, windpipe, beard, skeleton, velum, bowels, respiratory system, white blood circles

[cells?], red blood circles [cells?], digestive system, blood vessels, colon, larynx, urinary system, ridge, nasal cavity, ass.

2. 2nd topic: teaching and learning English

- **Group A (173 words)**

Teacher, book, chalk, blackboard, classroom, desk, school, university, college, professor, dean, grammar, comprehension, texts, phonetics, writing, morphology, computers, internet, native speakers, speaking, class, chair, notebook, pens, lectures, labs, courses, foreign language, help, word, test, quiz, examination, vocabulary, listening, conversation, bag, pencil, translation, research papers, table, magazine, paper, dictionary, rubber, money, literature, library, doctor, marks, subjects, radio, communication, instructor, newspaper, study, sheets, composition, novel, linguistics, clever, cassettes, encyclopaedia, time, skills, material, reading, behaviourist theory, mentalist theory, mind, concentration, phonology, spelling, research, pronunciation, acquisition, imitation, response, question, reply, explanation, understanding, difficulty, homework, presentation, motivation, chair, meaning, speech, emotion, information, forget, careless, intelligent, mentality, sentence, phrases, answer, letters, language, essays, practice, chat, department, applied, television, improving, disabilities, project, preparing, lessons, participation, results, pupils, music, passage, punishment, England, programme, bookshop, seats, resources, target language, English channels, institutions, equipment, roles, good student, stupid, chapter, ability, limited, useful, higher, power, interesting, strong, headmaster, memorize, roller, learn by heart, method, guide, approaches, techniques, activities, psychology,

pedagogy, error, alphabetic, section, complex, respect, pamphlet, readers, writers, political, cultural, anthology, videos, CD, score , partner, supervisor, pass, fail, new vocabulary, knowledge, talkative, pictures, morpheme.

- **Group B (96 words)**

Teacher, book, chalk, blackboard, classroom, desk, school, university, college, facility, institute, professor, dean, manager, grammar, comprehension, texts, phonetics, writing, morphology, computers, internet, references, native speakers, visiting, countries, source language, speaking, assignments, class, chair, notebook, pens, lectures, labs, courses, travel, foreign language, help, word, exam, test, quiz, examination, vocabulary, listening, drama, conversation, bag, pencil, exercise, translation, research papers, table, magazine, paper, dictionary, rubber, money, literature, library, doctor, marks, head, education, subjects, universal, song, TV, radio, communication, instructor, newspaper, diploma, study, explain, way, understand, sheets, composition, novel, poetry, linguistics, clever, friends, family, news, cassettes, encyclopaedia, desire, time, skills, experience, material, hopes, wishes.

- **Both Groups (202 words)**

Teacher, book, chalk, blackboard, classroom, desk, school, university, college, facility, institute, professor, dean, manager, grammar, comprehension, texts, phonetics, writing, morphology, computers, internet, references, native speakers, visiting, countries, source language, speaking, assignments, class, chair, notebook, pens, lectures, labs, courses, travel, foreign language, help, word, exam, test, quiz, examination, vocabulary, listening, drama, conversation, bag, pencil, exercise,

translation, research papers, table, magazine, paper, dictionary, rubber, money, literature, library, doctor, marks, head, education, subjects, universal, song, TV, radio, communication, instructor, newspaper, diploma, study, explain, way, understand, sheets, composition, novel, poetry, linguistics, clever, friends, family, news, cassettes, encyclopaedia, desire, time, skills, experience, material, hopes, wishes, reading, behaviourist theory, mentalist theory, mind, concentration, phonology, spelling, research, pronunciation, acquisition, imitation, response, question, reply, explanation, understanding, difficulty, homework, presentation, motivation, chair, meaning, speech, emotion, information, forget, careless, intelligent, mentality, sentence, phrases, answer, letters, language, essays, practice, chat, department, applied, television, improving, disabilities, project, preparing, lessons, participation, results, pupils, music, passage, punishment, England, programme, bookshop, seats, resources, target language, English channels, institutions, equipment, roles, good student, stupid, chapter, ability, limited, useful, higher, power, interesting, strong, headmaster, memorize, roller, learn by heart, method, guide, approaches, techniques, activities, psychology, pedagogy, error, alphabetic, section, complex, respect, pamphlet, readers, writers, political, cultural, anthology, videos, CD, score , partner, supervisor, pass, fail, new vocabulary, knowledge, talkative, pictures, morpheme.

Appendix 14: Sample of transcript of the three groups interviews

DET Monolingual Dictionary

1. High vocabulary knowledge (HVK) students

Teacher (T): *(I use a monolingual dictionary (English/English).*
All responses to this strategy were *always* except F1's response which was seldom.

T. (F1 *why don't you use English/English dictionary?*)
F1. "Because I think I am not" (*I mean I do not like to consult English/English dictionary*).
T. (*What do you use to discover meaning then, you do not even use English/ Arabic frequently?*)
F1. (*I like to read in English only and do not like to look for meanings*).
T. "What about the meaning"
F1. "I know the meaning"
B1. "Even professional people sometimes find words they do not know, they have to find in dictionary".
F1. "I'd like my teacher to give us the meaning in English".
M1. "I use it always because this strategy helps us to get more and more vocabulary".
R1. "It also helps us expand our ideas about a word also pronunciation".
B1. "Even when you search a word in dictionary you make an effort and this makes you not forget the word".
A1. "It also helps you know part of speech".
B1. "Yeah, sometimes you find sentences".
T. (*A1 any comment*).
A1. (*I agree with B1*).

2. Moderate vocabulary knowledge (MVK) students

T. *(I use a monolingual dictionary (English/English).*
Responses were different ranging from seldom to usually.

T. (*When do you use this strategy?*)
W2. (*In* "pronunciation" *after I check the word's meaning in English/ Arabic dictionary, to make sure of its pronunciation*).
A2. (*I use English/English When I want to know a synonym to the word*).
S2. (*My response was "usually" when I do not find the word's meaning in an English/Arabic dictionary, I use an English/English dictionary or when I want to know a synonym to it which might be easier than this difficult word or in case of pronunciation*).
T. *(But you use it after using English/Arabic)*
S2. (*For the meaning, I use English/Arabic first, for pronunciation I use English/English*).

F2. (*for pronunciation I use English/English first, and if I do not understand meaning in an English/Arabic dictionary, I sometimes use English/English for explanation).*
N2. (*I often use English/English for pronunciation, sometimes I need to see the word in a sentence which is not available in English/Arabic dictionaries and available in English/English ones. I also use English/English in my spare time. Because it contains every thing related to vocabulary)*
T. (So *you (*meaning all students*) find meaning in English/Arabic*).
N2. (*Exactly and English/English provides more information).*

3. Low vocabulary knowledge (LVK) students

T. *(I use a monolingual dictionary (English/English).*
Responses were 4 seldom and 1 occasionally.

T. *(Why do you not frequently use English/English dictionaries? Does this mean that you depend more on English/Arabic).*
S3. (*Yes, I depend more on the English/Arabic).*
A3. (*I do not use English/English dictionary because it is boring and difficult to understand, sometimes I find two lines and can't understand two words from them*).
M3. *(It means that we use Arabic for checking meaning).*
T. (*Do you think English/English is difficult to use or not beneficial could you give interpretation?).*
S3. *(To understand an English word through another English word would not be easy, sometimes I look a word up in English/English dictionary, I find many unknown words, so using English/English makes the process of discovering meaning longer).*
M3. *(I feel it is difficult to get the meaning through another English word; it would be difficult to remember two English words together, I will get confused).*
T. (*You mean a synonym is sometimes more difficult than the word itself*).
M3. (*Yes*).
T. (*So sometimes you use English/English, but if you can't understand the meaning, you use English/Arabic. One might say let us use English/Arabic from the beginning. It would be easier, wouldn't it*).
N3. (*We must use English/Arabic).*
L3. *(English/Arabic is easier because we know the word's meaning in Arabic first, then we may use the English/English).*
T. *(English/English is after English/Arabic).*
N3. (*Certainly, it is impossible for me to see a word for the first time and discover its meaning in English/English from the beginning, I will get more confused, so I see it in English/Arabic first, and it is a must).*